

**FIRST AMENDED AND RESTATED BYLAWS
OF
BIO-PATH HOLDINGS, INC.**

Adopted by the Board of Directors: June 7, 2017
Effective: June 7, 2017

ARTICLE I

Offices

Section 1.1 Registered Offices. The registered office of Bio-Path Holdings, Inc. (the "Corporation") in the State of Delaware shall be located at 1675 S. State Street, Suite B, Dover, Delaware 19901, Kent County. The name of the Corporation's registered agent at such address shall be Capitol Services, Inc. The registered office and/or registered agent of the Corporation may be changed from time to time by action of the Board of Directors.

Section 1.2 Other Offices. The Corporation may also have offices at such other places both within and without the State of Delaware as the Board of Directors may from time to time determine or the business of the Corporation may require.

Section 1.3 Books. The books of the Corporation may be kept within or without of the State of Delaware as the Board of Directors may from time to time determine or the business of the Corporation may require.

ARTICLE II

Stockholders Meetings

Section 2.1 Annual Meetings.

(a) An annual meeting of stockholders shall be held for the election of directors and the transaction of such other business as may properly be brought before the meeting in accordance with these Bylaws at such date, time and place, if any, as may be fixed by resolution of the Board of Directors of the Corporation from time to time.

(b) Only such business (other than stockholder nominations of directors, which shall be made in compliance with, and shall be exclusively governed by, Section 3.1(a) of these Bylaws) shall be conducted at an annual meeting of stockholders as shall have been properly brought before the meeting. For business to be properly brought before the meeting, it must be (i) authorized by the Board of Directors and specified in the notice, or a supplemental notice, of the meeting, (ii) otherwise brought before the meeting by or at the direction of the Board of Directors, or (iii) otherwise properly brought before the meeting by a stockholder of the Corporation who was a stockholder of record both at the time of giving of notice by the stockholder as provided for in this Section 2.1(b) and at the time of the annual meeting of stockholders, who is entitled to vote at the meeting on any such business and who has complied with the notice and other requirements

set forth in these Bylaws; clause (iii) shall be the exclusive means for a stockholder to submit such business (other than proposals properly brought under Rule 14a-8 under the Securities Exchange Act of 1934, as amended (the "Exchange Act") and included in the Corporation's notice of the meeting, which proposals are not governed by these Bylaws) before an annual meeting of stockholders.

(c) For business to be properly brought before an annual meeting by a stockholder pursuant to Section 2.1(b)(iii) of these Bylaws, the stockholder must have given timely written notice thereof to the Secretary of the Corporation as hereinafter provided and such proposal must otherwise be a proper subject for action by the Corporation's stockholders. To be timely, a stockholder's written notice shall set forth all information required under this Section 2.1(c) and shall be delivered or mailed to and received at the principal executive offices of the Corporation not less than sixty (60) days nor more than ninety (90) days prior to the first anniversary of the immediately preceding year's annual meeting date; provided, however, that in the event that no annual meeting was held in the previous year or the annual meeting is called for a date that is not within thirty (30) days from the first anniversary of the immediately preceding year's annual meeting date, written notice by a stockholder in order to be timely must be received not earlier than the 90th day before the date of such annual meeting and not later than the later of the 60th day before the date of such annual meeting, as originally convened, or the close of business on the 10th day following the day on which the first public disclosure of the date of such annual meeting was made. In no event shall the public disclosure of an adjournment or postponement of an annual meeting commence a new time period for the giving of stockholder's notice as described above. A stockholder's notice to the Secretary delivered pursuant to this Section 2.1(c) shall set forth:

- (i) as to each matter the stockholder proposes to bring before the meeting,
 - (A) a description of the proposal or business (including the complete text of any resolutions to be presented at the annual meeting, and, in the event that such business includes a proposal to amend these Bylaws, the text of the proposed amendment) desired to be brought before the annual meeting,
 - (B) the reasons for conducting such business at the annual meeting, and
 - (C) any material interest in such business of such stockholder or any Stockholder Associated Person (as defined below), individually or in the aggregate, including any anticipated benefit to the stockholder or the Stockholder Associated Person therefrom;
- (ii) to the extent known by the stockholder giving the notice, the name and address of any other stockholder supporting the proposal of business on the date of such stockholder's notice;
- (iii) as to the stockholder giving the notice and any Stockholder Associated Person:
 - (A) the class or series and number of shares of capital stock or other securities of the Corporation (collectively, "Company Securities"), if any, which are owned beneficially or of record by such person, the date(s) on which such Company Securities were acquired and the

- investment intent of such acquisition(s), and any short interest (including any opportunity to profit or share in any benefit from any decrease in the price of such stock or other security) in any Company Securities of any such person,
- (B) the nominee holder for, and number of, any Company Securities owned beneficially but not of record by such person,
 - (C) whether and the extent to which such person, directly or indirectly (through brokers, nominees or otherwise), is subject to or during the last six months has engaged in any hedging, derivative or other transaction or series of transactions or entered into any other agreement, arrangement or understanding (including any short interest, any borrowing or lending of securities or any proxy or voting agreement), the effect or intent of which is to (x) manage risk or benefit of changes in the price of Company Securities for such person, or (y) increase or decrease the voting power of such person in the Corporation disproportionately to such person's economic interest in the Company Securities, and
 - (D) a representation that such stockholder or Stockholder Associated Person intends to appear in person or by proxy at the annual meeting to bring such business before the meeting;
- (iv) as to the stockholder giving the notice or any Stockholder Associated Person with an interest or ownership referred to in Section 2.1(c)(i) or (iii)(C) of these Bylaws:
- (A) the name and address of such stockholder, as they appear on the Corporation's stock ledger, and the current name and business address, if different, of each such Stockholder Associated Person, and
 - (B) the investment strategy or objective, if any, of such stockholder and each such Stockholder Associated Person who is not an individual and a copy of the prospectus, offering memorandum or similar document, if any, provided to investors or potential investors in such stockholder and each such Stockholder Associated Person;
- (v) as to the stockholder giving the notice and any Stockholder Associated Person, a description of all arrangements or understandings between such person and any other person or persons (including their names) in connection with the proposal of such business by such stockholder and any material interest of such stockholder or such beneficial owner in such business, including any anticipated benefit to the stockholder or such beneficial owner therefrom; and

- (vi) as to the stockholder giving the notice and any Stockholder Associated Person, a representation that such person intends to appear in person or by proxy at the annual meeting to bring such business before the meeting (the information described in clauses (iii) through (vi), the "Proposing Stockholder Information").

Unless otherwise required by applicable law, if a stockholder (or qualified representative) does not appear at the meeting of stockholders to present business proposed by such stockholder pursuant to this Section 2.1(c), such proposed business shall not be transacted, even though proxies in respect of such vote may have been received by the Corporation. No business shall be conducted at any annual meeting except in accordance with the procedures set forth in this Section 2.1(c). The chairman of the meeting at which any business is proposed by a stockholder shall, if the facts warrant, determine and declare to the meeting that such business was not properly brought before the meeting in accordance with the provisions of this Section 2.1(c), and in such event, the business not properly before the meeting shall not be transacted.

Section 2.2 Special Meetings. A special meeting of the stockholders of the Corporation may be called at any time by the Chairman of the Board, the Chief Executive Officer (or if there is no Chief Executive Officer, the President) or the Board of Directors of the Corporation, pursuant to a resolution adopted by a majority of the whole Board of Directors, and must be called by the Chief Executive Officer upon written request of the holders of not less than a majority of the issued and outstanding shares entitled to vote at such special meeting. Only such business shall be conducted at a special meeting of stockholders as shall have been brought before the meeting pursuant to the Corporation's notice of meeting.

Section 2.3 Notice of Meetings. A written notice of each annual or special meeting of stockholders shall be given stating the place, if any, date and time of the meeting, the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such meeting, the record date for determining the stockholders entitled to vote at the meeting (if such date is different from the record date for stockholders entitled to notice of the meeting) and, in the case of a special meeting, the purpose or purposes for which the meeting is called. Unless otherwise provided by applicable law, the Certificate of Incorporation (the "Certificate of Incorporation") of the Corporation or these Bylaws, such notice of meeting shall be given not less than ten (10) nor more than sixty (60) days before the date of the meeting to each stockholder of record entitled to vote at such meeting as of the record date for determining the stockholders entitled to notice of the meeting, personally, by mail or, to the extent and in the manner permitted by applicable law, electronically. If mailed, such notice shall be deemed to be given when deposited in the mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the Corporation.

Section 2.4 Adjournments. Any annual or special meeting of stockholders may be adjourned from time to time to reconvene at the same or some other place, if any, and notice need not be given of any such adjourned meeting if the date, time and place, if any, thereof and the means of remote communication, if any, by which stockholders and proxyholders may be deemed present in person and vote at such adjourned meeting are announced at the meeting at which the adjournment is taken. At the adjourned meeting any business may be transacted which might have been transacted at the original meeting. If the adjournment is for more than thirty (30) days, or if

after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the adjourned meeting in accordance with Section 2.3 of these Bylaws. If the Board of Directors shall fix a new record date for determination of stockholders entitled to vote at an adjourned meeting, the Board of Directors shall also fix as the record date for stockholders entitled to notice of such adjourned meeting the same or an earlier date as the record date determined for stockholders entitled to vote at the adjourned meeting.

Section 2.5 Quorum. Except as otherwise provided by applicable law, the Certificate of Incorporation or these Bylaws, the presence in person or by proxy of the holders of stock having a majority of the votes which could be cast by the holders of all outstanding stock entitled to vote at the meeting shall constitute a quorum at each meeting of stockholders. In the absence of a quorum, the stockholders so present may, by the affirmative vote of the holders of stock having a majority of the votes which could be cast by all such holders, adjourn the meeting from time to time in the manner provided in Section 2.4 of these Bylaws until a quorum is present. If a quorum is present when a meeting is convened, the subsequent withdrawal of stockholders, even though less than a quorum remains, shall not affect the ability of the remaining stockholders lawfully to transact business.

Section 2.6 Conduct; Remote Communication.

(a) Meetings of stockholders shall be presided over by the Chairman of the Board or, in his or her absence, by the Chief Executive Officer, or in his or her absence, by a chairman designated by the Board of Directors, or in the absence of such designation by a chairman chosen at the meeting. The Secretary shall act as secretary of the meeting, but in his or her absence the chairman of the meeting may appoint any person to act as secretary of the meeting.

(b) If authorized by the Board of Directors in accordance with these Bylaws and applicable law, stockholders and proxyholders not physically present at a meeting of stockholders may, by means of remote communication, (i) participate in a meeting of stockholders and (ii) be deemed present in person and vote at a meeting of stockholders, whether such meeting is to be held at a designated place or solely by means of remote communication, provided that (A) the Corporation shall implement reasonable measures to verify that each person deemed present and permitted to vote at the meeting by means of remote communication is a stockholder or proxyholder, (B) the Corporation shall implement reasonable measures to provide such stockholders and proxyholders a reasonable opportunity to participate in the meeting and to vote on matters submitted to the stockholders, including an opportunity to read or hear the proceedings of the meeting substantially concurrently with such proceedings, and (C) if any stockholder or proxyholder votes or takes other action at the meeting by means of remote communication, a record of such vote or other action shall be maintained by the Corporation.

Section 2.7 Voting.

(a) Except as otherwise provided by the Certificate of Incorporation, each stockholder entitled to vote at any meeting of stockholders shall be entitled to one vote for each share of stock held by such stockholder which has voting power on the matter in question.

(b) Voting at meetings of stockholders need not be by written ballot and need not be conducted by inspectors of election unless so required by Section 2.9 of these Bylaws or so determined by the holders of stock having a majority of the votes which could be cast by the holders of all outstanding stock entitled to vote which are present in person or by proxy at such meeting. Unless otherwise provided in the Certificate of Incorporation, directors shall be elected by a plurality of the votes cast in the election of directors. Each other matter shall, unless otherwise provided by applicable law, the Certificate of Incorporation or these Bylaws, be decided by the vote of the holders of stock having a majority of the votes which could be cast by the holders of all stock entitled to vote on such matter which are present in person or by proxy at the meeting.

Section 2.8 Proxies.

(a) Each stockholder entitled to vote at a meeting of stockholders may authorize another person or persons to act for such stockholder by proxy filed with the Secretary before or at the time of the meeting. No such proxy shall be voted or acted upon after three (3) years from its date, unless the proxy provides for a longer period. A duly executed proxy shall be irrevocable if it states that it is irrevocable and if, and only as long as, it is coupled with an interest sufficient in law to support an irrevocable power. A stockholder may revoke any proxy which is not irrevocable by attending the meeting and voting in person or by filing with the Secretary an instrument in writing revoking the proxy or another duly executed proxy bearing a later date.

(b) A stockholder may authorize another person or persons to act for such stockholder as proxy (i) by executing a writing authorizing such person or persons to act as such, which execution may be accomplished by such stockholder or such stockholder's authorized officer, director, partner, employee or agent (or, if the stock is held in a trust or estate, by a trustee, executor or administrator thereof) signing such writing or causing his or her signature to be affixed to such writing by any reasonable means, including, but not limited to, facsimile signature, or (ii) by transmitting or authorizing the transmission of a telegram, cablegram or other means of electronic transmission (each, a "Transmission") to the person who will be the holder of the proxy or to a proxy solicitation firm, proxy support service organization or like agent duly authorized by the person who will be the holder of the proxy to receive such Transmission; provided that any such Transmission must either set forth or be submitted with information from which it can be determined that such Transmission was authorized by such stockholder.

(c) Any inspector or inspectors appointed pursuant to Section 2.9 of these Bylaws shall examine Transmissions to determine if they are valid. If no inspector or inspectors are so appointed, the Secretary or such other person or persons as shall be appointed from time to time by the Board of Directors shall examine Transmissions to determine if they are valid. If it is determined that a Transmission is valid, the person or persons making that determination shall specify the information upon which such person or persons relied. Any copy, facsimile telecommunication or other reliable reproduction of such a writing or Transmission may be substituted or used in lieu of the original writing or Transmission for any and all purposes for which the original writing or Transmission could be used; provided that such copy, facsimile telecommunication or other reproduction shall be a complete reproduction of the entire original writing or Transmission.

Section 2.9 Voting Procedures and Inspectors of Elections.

(a) If the Corporation has a class of voting stock that is (i) listed on a national securities exchange, (ii) authorized for quotation on an interdealer quotation system of a registered national securities association or (iii) held of record by more than 2,000 stockholders, the Board of Directors shall, in advance of any meeting of stockholders, appoint one or more inspectors (individually an "Inspector," and collectively the "Inspectors") to act at such meeting and make a written report thereof. The Board of Directors may designate one or more persons as alternate Inspectors to replace any Inspector who shall fail to act. If no Inspector or alternate is able to act at such meeting, the chairman of the meeting shall appoint one or more other persons to act as Inspectors. Each Inspector, before entering upon the discharge of his or her duties, shall take and sign an oath faithfully to execute the duties of Inspector with strict impartiality and according to the best of his or her ability.

(b) The Inspectors shall (i) ascertain the number of shares of stock of the Corporation outstanding and the voting power of each, (ii) determine the number of shares of stock of the Corporation present in person or by proxy at such meeting and the validity of proxies and ballots, (iii) count all votes and ballots, (iv) determine and retain for a reasonable period of time a record of the disposition of any challenges made to any determination by the Inspectors and (v) certify their determination of the number of such shares present in person or by proxy at such meeting and their count of all votes and ballots. The Inspectors may appoint or retain other persons or entities to assist them in the performance of their duties.

(c) The date and time of the opening and the closing of the polls for each matter upon which the stockholders will vote at a meeting shall be announced at such meeting. No ballots, proxies or votes, nor any revocations thereof or changes thereto, shall be accepted by the Inspectors after the closing of the polls unless the Court of Chancery of the State of Delaware upon application by any stockholder shall determine otherwise.

(d) In determining the validity and counting of proxies and ballots, the Inspectors shall be limited to an examination of the proxies, any envelopes submitted with such proxies, any information referred to in Section 2.8(b) and (c) of these Bylaws, ballots and the regular books and records of the Corporation, except that the Inspectors may consider other reliable information for the limited purpose of reconciling proxies and ballots submitted by or on behalf of banks, brokers, their nominees or similar persons which represent more votes than the holder of a proxy is authorized by a stockholder of record to cast or more votes than such stockholder holds of record. If the Inspectors consider other reliable information for the limited purpose permitted herein, the Inspectors, at the time they make their certification pursuant to Section 2.9(b) of these Bylaws, shall specify the precise information considered by them, including the person or persons from whom such information was obtained, when and the means by which such information was obtained and the basis for the Inspectors' belief that such information is accurate and reliable.

Section 2.10 Fixing Date of Determination of Stockholders of Record.

(a) In order that the Corporation may determine the stockholders entitled to notice of any meeting of stockholders or any adjournment thereof, the Board of Directors may fix

a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors and which record date shall, unless otherwise required by applicable law, be not more than sixty (60) nor less than ten (10) days before the date of such meeting. If the Board of Directors so fixes a date, such date shall also be the record date for determining the stockholders entitled to vote at such meeting, unless the Board of Directors determines, at the time it fixes such record date, that a later date on or before the date of the meeting shall be the date for making such determination. If no record date is fixed by the Board of Directors in respect of a meeting, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for determination of stockholders entitled to vote at the adjourned meeting, and in such case shall also fix as the record date for stockholders entitled to notice of such adjourned meeting the same or an earlier date as that fixed for determination of stockholders entitled to vote in accordance herewith at the adjourned meeting.

(b) In order that the Corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the Board of Directors may fix a record date, which shall not be more than sixty (60) days prior to such action. If no such record date is so fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

Section 2.11 List of Stockholders Entitled to Vote. The Secretary shall prepare, at least ten days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting (provided, however, if the record date for determining the stockholders entitled to vote is less than ten (10) days before the date of the meeting, the list shall reflect the stockholders entitled to vote as of the 10th day before the meeting date), arranged in alphabetical order, and showing the address and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting for a period of at least ten days prior to the meeting: (a) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (b) during ordinary business hours, at the principal place of business of the Corporation. In the event that the Corporation determines to make the list available on an electronic network, the Corporation may take reasonable steps to ensure that such information is available only to stockholders of the Corporation. If the meeting is to be held at a place, the list shall also be produced and kept at the time and place of the meeting during the whole time thereof and may be inspected by any stockholder who is present. If the meeting is to be held solely by means of remote communication, the list shall be open to the examination of any stockholder during the whole time thereof on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting. The stock ledger shall be the only evidence as to who are the stockholders entitled to examine the stock ledger, the list of stockholders or the books of the Corporation, or to vote in person or by proxy at any meeting of stockholders.

Section 2.12 Stockholder Action by Written Consent Without a Meeting. Any action required or permitted to be taken at any annual or special meeting of the stockholders may be taken without a meeting, without prior notice and without a vote, if a consent or consents in writing, setting forth the action so taken, shall be signed by the stockholders having not less than the minimum number of votes that would be necessary under the Certificate of Incorporation, these Bylaws, and the DGCL to authorize or take the action at a meeting at which all shares entitled to vote were present and voted.

ARTICLE III

Board of Directors

Section 3.1 Election; Resignation; Removal; Vacancies.

(a) Only persons who are nominated in accordance with the procedures set forth in this Section 3.1(a) shall be eligible for election as directors of the Corporation. Nominations of persons for election to the Board of Directors may be made at a meeting of stockholders by the Board of Directors or by any stockholder of the Corporation entitled to vote in the election of directors at the meeting who complies with the notice procedures set forth in this paragraph (a). Any nomination by a stockholder must be made by timely written notice to the Secretary as hereinafter provided. To be timely, a stockholder's written notice shall set forth all information required under this Section 3.1(a) and shall be delivered or mailed to and received at the principal executive offices of the Corporation: (1) with respect to an election to be held at an annual meeting of stockholders, not less than sixty (60) days nor more than ninety (90) days prior to the first anniversary of the immediately preceding year's annual meeting date; provided, however, that in the event that no annual meeting was held in the previous year or the annual meeting is called for a date that is not within thirty (30) days from the first anniversary of the immediately preceding year's annual meeting date, written notice by a stockholder in order to be timely must be received not earlier than the 90th day before the date of such annual meeting and not later than the later of the 60th day before the date of such annual meeting, as originally convened, or the close of business on the 10th day following the day on which the first public disclosure of the date of such annual meeting was made, and (2) with respect to an election to be held at a special meeting of stockholders called for the purpose of electing directors, not later than the close of business on the 10th day following the day on which the first public disclosure of the date of such special meeting was made. In no event shall the public disclosure of an adjournment or postponement of any annual or special meeting commence a new time period for giving of a stockholder notice as described above. A stockholder's notice to the Secretary delivered pursuant to this Section 3.1(a) shall set forth:

- (i) as to each person whom the stockholder proposes to nominate for election or re-election as a director (each, a "Proposed Nominee"), all information relating to the Proposed Nominee that would be required to be disclosed in connection with the solicitation of proxies for the election of the Proposed Nominee as a director in an election contest (even if an election contest is not involved), or would otherwise be required in connection with such solicitation, in each case pursuant to Regulation 14A (or any successor provision) under the Exchange Act and the rules thereunder; and

- (ii) as to the stockholder giving the notice and any Stockholder Associated Person, the Proposing Stockholder Information with respect to such person.

Such notice shall be accompanied by a written representation and agreement, in the form provided by the Secretary upon written request, executed by the Proposed Nominee, that such Proposed Nominee (A) is not, and will not become a party to, any agreement, arrangement or understanding with any person or entity other than the Corporation in connection with service or action as a director that has not been disclosed to the Corporation, (B) consents to being named as a nominee and to serve as a director if elected, (C) is not and will not become a party to (1) any agreement, arrangement or understanding with, and has not given any commitment or assurance to, any person or entity as to how such Proposed Nominee, if elected as a director of the Corporation, will act or vote on any issue or question (a "Voting Commitment") that has not been disclosed to the Corporation or (2) any Voting Commitment that could limit or interfere with such Proposed Nominee's ability to comply, if elected as a director of the Corporation, with such Proposed Nominee's fiduciary duties under applicable law and (D) would be in compliance if elected as a director of the Corporation, and will comply with all applicable corporate governance, conflict of interest, confidentiality and stock ownership and trading policies and guidelines of the Corporation.

At the request of the Board of Directors, any person nominated by the Board of Directors for election as a director shall furnish to the Secretary (in accordance with any applicable time periods prescribed for delivery of notice under these Bylaws) that information required to be set forth in a stockholder's notice of nomination which pertains to the nominee. The Corporation may require any proposed nominee to furnish such other information as may reasonably be required by the Corporation to determine the eligibility of such proposed nominee to serve as a director of the Corporation.

Notwithstanding anything in this Section 3.1(a) to the contrary, in the event that the number of directors to be elected to the Board of Directors is increased, and there is no public disclosure of such action at least twenty (20) days prior to the first anniversary of the immediately preceding year's annual meeting date, a stockholder's notice required by this Section 3.1(a) shall also be considered timely, but only with respect to nominees for any new positions created by such increase, if it shall be delivered to the Secretary at the principal executive office of the Corporation not later than the 10th day following the day on which such public disclosure is first made by the Corporation.

No person shall be eligible for election as a director of the Corporation unless nominated in accordance with the procedures set forth in this Section 3.1(a). Unless otherwise required by applicable law, if a stockholder (or qualified representative) does not appear at the meeting of stockholders to present a nomination proposed by such stockholder pursuant to this Section 3.1(a), such nomination shall be disregarded, even though proxies in respect of such vote may have been received by the Corporation. The chairman of the meeting at which a stockholder nomination is presented shall, if the facts warrant, determine and declare to the meeting that such nomination was not made in accordance with the procedures prescribed by this Section 3.1(a), and, in such event, the defective nomination shall be disregarded.

(b) Any director may resign at any time by giving written notice to the Chairman of the Board, the Chief Executive Officer or the Secretary. A resignation shall take effect when the resignation is delivered to the person to whom it is directed unless the resignation specifies a later effective date or an effective date determined upon the happening of an event or events, without any need for its acceptance. A resignation that is conditioned upon the director failing to receive a specified vote for reelection as a director may provide that it is irrevocable.

(c) Any director may be removed by holders of a majority of the shares then entitled to vote generally in an election of directors.

(d) Newly created directorships resulting from any increase in the authorized number of directors or any vacancies in the Board of Directors resulting from death, resignation, retirement, disqualification, removal from office or other cause shall, unless otherwise provided by applicable law, be filled by the affirmative vote of a majority of the remaining directors then in office, even if such a majority is less than a quorum of the Board of Directors, or by a sole remaining director. Any director so chosen shall hold office for the remainder of the full term of the class for which such director shall have been chosen or in which such vacancy occurred and until his or her successor shall be elected and qualified. No decrease in the authorized number of directors shall shorten the term of any incumbent director.

Section 3.2 Number. The Board of Directors shall consist of not less than three (3) nor more than fifteen (15) members, with the exact number to be determined from time to time by resolution of the Board of Directors.

Section 3.3 Regular Meetings. Regular Meetings of the Board of Directors shall be held without notice at such place or places, on such date or dates, and at such time or times as shall have been established by the Board of Directors. A notice of each regular meeting shall not be required.

Section 3.4 Special Meetings. Special meetings of the Board of Directors may be called by the Chairman of the Board, the Chief Executive Officer, the President, or by not less than one-third of the directors then in office. Notice of a special meeting of the Board of Directors shall be given by the person or persons calling the meeting in sufficient time for the convenient assembly of the directors thereat. The purpose or purposes of a special meeting need not be stated in the call or notice.

Section 3.5 Organization. Meetings of the Board of Directors shall be presided over by the Chairman of the Board or, in his or her absence, by the Chief Executive Officer, or in his or her absence, by a chairman chosen at the meeting. The Secretary shall act as secretary of the meeting, but in his or her absence the chairman of the meeting may appoint any person to act as secretary of the meeting. A majority of the directors present at a meeting, whether or not they constitute a quorum, may adjourn such meeting to any other date, time or place without notice other than announcement at the meeting.

Section 3.6 Quorum: Vote Required for Action. At all meetings of the Board of Directors a majority of the whole Board of Directors shall constitute a quorum for the transaction of business. Unless the Certificate of Incorporation or these Bylaws otherwise provide, the vote of

a majority of the directors present at a meeting at which a quorum is present shall be the act of the Board of Directors.

Section 3.7 Telephonic Meetings. Directors, or any committee of directors designated by the Board of Directors, may participate in a meeting of the Board of Directors or such committee by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and participation in a meeting pursuant to this Section 3.7 shall constitute presence in person at such meeting.

Section 3.8 Board of Director Action by Written Consent Without a Meeting. Unless otherwise restricted by the Certificate of Incorporation or these Bylaws, any action required or permitted to be taken at any meeting of the Board of Directors, or of any committee thereof, may be taken without a meeting if all members of the Board of Directors or such committee, as the case may be, consent thereto in writing (which may be in counterparts) or by electronic transmission, and the written consent or consents or electronic transmission or transmissions are filed with the minutes of proceedings of the Board of Directors or such committee. Such filing shall be made in paper form if the minutes of the Corporation are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form. Such action by written consent or consent by electronic transmission shall have the same force and effect as a unanimous vote of the Board of Directors.

Section 3.9 Committees. The Board of Directors may, by resolution, designate one or more committees, including but not limited to an Audit Committee, a Compensation Committee and a Nominating/Corporate Governance Committee, each committee to consist of one or more directors of the Corporation. The Board of Directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of the committee, the member or members present at any meeting and not disqualified from voting, whether or not a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in place of any such absent or disqualified member. Any such committee, to the extent permitted by applicable law and provided in these Bylaws or in the resolution of the Board of Directors designating such committee, or an amendment to such resolution, shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the Corporation, and may authorize the seal of the Corporation to be affixed to all papers which may require it.

Section 3.10 Committee Rules. Unless the Board of Directors otherwise provides, each committee designated by the Board of Directors may make, alter and repeal rules not inconsistent with the provisions of applicable law for the conduct of its business. In the absence of such rules, each committee shall conduct its business in the same manner as the Board of Directors conducts its business pursuant to this Article III of these Bylaws.

Section 3.11 Reliance upon Records. Every director, and every member of any committee of the Board of Directors, shall, in the performance of his or her duties, be fully protected in relying in good faith upon the records of the Corporation and upon such information, opinions, reports or statements presented to the Corporation by any of its officers or employees, or committees of the Board of Directors, or by any other person as to matters the director or member

reasonably believes are within such other person's professional or expert competence and who has been selected with reasonable care by or on behalf of the Corporation, including, but not limited to, such records, information, opinions, reports or statements as to the value and amount of the assets, liabilities and/or net profits of the Corporation, or any other facts pertinent to the existence and amount of surplus or other funds from which dividends might properly be declared and paid, or with which the Corporation's capital stock might properly be purchased or redeemed.

Section 3.12 Interested Directors. A director who is directly or indirectly a party to a contract or transaction with the Corporation, or is a director or officer of or has a financial interest in any other corporation, partnership, association or other organization which is a party to a contract or transaction with the Corporation, may be counted in determining whether a quorum is present at any meeting of the Board of Directors or a committee thereof at which such contract or transaction is considered or authorized, and such director may participate in such meeting and vote on such authorization to the extent permitted by applicable law, including Section 144 of the DGCL.

Section 3.13 Compensation. Unless otherwise restricted by the Certificate of Incorporation, the Board of Directors shall have the authority to fix the compensation of directors. The directors shall be paid their reasonable expenses, if any, of attendance at each meeting of the Board of Directors or a committee thereof and may be paid a fixed sum for attendance at each such meeting and an annual retainer or salary for services as a director or committee member. No such payment shall preclude any director from serving the Corporation in any other capacity and receiving compensation therefor.

ARTICLE IV

Officers

Section 4.1 Executive Officers; Election; Qualification; Term of Office. The Board of Directors shall elect a Chairman of the Board from among its members and shall elect a Chief Executive Officer and a Chief Financial Officer. The Board of Directors shall also elect a Secretary and may elect a President, one or more Vice Presidents, and one or more Assistant Secretaries. Any number of offices may be held by the same person. Each officer shall hold office until the first meeting of the Board of Directors after the annual meeting of stockholders next succeeding his or her election, and until his or her successor is elected and qualified or until his or her earlier death, resignation or removal.

Section 4.2 Resignation; Removal; Vacancies. Any officer may resign at any time by giving written notice to the Chairman of the Board, the Chief Executive Officer or the Secretary. Unless otherwise stated in a notice of resignation, it shall take effect when received by the officer to whom it is directed, without any need for its acceptance. The Board of Directors may remove any officer with or without cause at any time, but such removal shall be without prejudice to the contractual rights of such officer, if any, with the Corporation. A vacancy occurring in any office of the Corporation may be filled for the unexpired portion of the term thereof by the Board of Directors at any regular or special meeting.

Section 4.3 Powers and Duties of Executive Officers. The officers of the Corporation shall have such powers and duties in the management of the Corporation as may be prescribed by the Board of Directors and, to the extent not so provided, as generally pertain to their respective offices, subject to the control of the Board of Directors. The Board of Directors may require any officer, agent or employee to give security for the faithful performance of his or her duties.

Section 4.4 Chief Executive Officer. The Chief Executive Officer of the Corporation shall in general supervise and control all of the business affairs of the Corporation, subject to the direction of the Board of Directors. The Chief Executive Officer may execute, in the name and on behalf of the Corporation, any deeds, mortgages, bonds, contracts or other instruments which the Board of Directors or a committee thereof has authorized to be executed, except in cases where the execution shall have been expressly delegated by the Board of Directors or a committee thereof to some other officer or agent of the Corporation.

Section 4.5 President. The President shall perform such duties and possess such powers as the Board of Directors or the Chief Executive Officer may from time to time prescribe. In the event of the absence, inability or refusal to act of the Chief Executive Officer, the President shall perform the duties of the Chief Executive Officer and, when so performing, shall have all the powers and be subject to all the restrictions upon the office of Chief Executive Officer.

Section 4.6 Chief Financial Officer. The Chief Financial Officer shall have the custody of the corporate funds and securities and shall keep full and accurate accounts of receipts and disbursements in books belonging to the Corporation and shall deposit all moneys and other valuable effects in the name and to the credit of the Corporation in such depositories as may be designated by the Board of Directors. The Chief Financial Officer shall disburse the funds of the Corporation as may be ordered by the Board of Directors, taking proper vouchers for such disbursements, and shall render to the Controlling Officer and the Board of Directors, at its regular meetings, or when the Board of Directors so requires, an account of all such officer's transactions as Chief Financial Officer and of the financial condition of the Corporation. If required by the Board of Directors, the Chief Financial Officer shall give the Corporation a bond in such sum and with such surety or sureties as shall be satisfactory to the Board of Directors for the faithful performance of the duties of the office and for the restoration to the Corporation, in case of such person's death, resignation, retirement or removal from office, of all books, papers, vouchers, money and other property of whatever kind in his possession or under his control belonging to the Corporation.

Section 4.7 Secretary. In addition to such other duties, if any, as may be assigned to the Secretary by the Board of Directors, the Chairman of the Board or the Chief Executive Officer, the Secretary shall (a) keep the minutes of proceedings of the stockholders, the Board of Directors and any committee of the Board of Directors in one or more books provided for that purpose; (b) see that all notices are duly given in accordance with the provisions of these Bylaws or as required by applicable law; (c) be the custodian of the records and seal of the Corporation; (d) affix or cause to be affixed the seal of the Corporation or a facsimile thereof, and attest the seal by his or her signature, to all documents the execution of which under seal is authorized by the Board of Directors; and (e) unless such duties have been delegated by the Board of Directors to a transfer agent of the Corporation, keep or cause to be kept a register of the name

and address of each stockholder, as the same shall be furnished to the Secretary by such stockholder, and have general charge of the stock transfer records of the Corporation.

Section 4.8 Assistant Secretaries. Except as may be otherwise provided in these Bylaws, Assistant Secretaries, if there be any, shall perform such duties and have such powers as from time to time may be assigned to them by the Board of Directors, the Chairman of the Board of Directors, the Chief Executive Officer, the President, if there be one, or any Vice President, if there be one, or the Secretary, and in the absence of the Secretary or in the event of such person's disability or refusal to act, shall perform the duties of the Secretary, and when so acting, shall have all the powers of and be subject to all the restrictions upon the Secretary.

Section 4.9 Vice Presidents. Except as may be otherwise provided in these Bylaws, Vice Presidents, if there be any, shall perform such duties and possess such powers as from time to time may be assigned to them by the Board of Directors, the Chief Executive Officer or the President. The Board of Directors may assign to any Vice President the title of Executive Vice President, Senior Vice President or any other such title.

Section 4.10 Other Officers. Such other officers as the Board of Directors may choose shall perform such duties and have such powers as from time to time may be assigned to them by the Board of Directors. The Board of Directors may delegate to any other officer of the Corporation the power to choose such other officers and to prescribe their respective duties and powers.

ARTICLE V

Stock Certificates and Transfers

Section 5.1 Certificated and Uncertificated Shares. Shares of the Corporation's stock may be certificated or uncertificated, as provided under applicable law. All certificates of stock of the Corporation shall be numbered and shall be entered in the books of the Corporation as they are issued. The certificates shall be signed by (a) the Chairman of the Board of Directors, the Chief Executive Officer, the President, if any, or a Vice President, if any, and (b) the Secretary or an Assistant Secretary of the Corporation, and certify the number of shares owned by such holder in the Corporation.

Section 5.2 Signatures. Any signature required to be on a certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if such person were such officer, transfer agent or registrar at the date of issue.

Section 5.3 Lost Certificates; Issuance of New Certificates. The Board of Directors may direct a new certificate to be issued in place of any certificate theretofore issued by the Corporation alleged to have been lost, stolen or destroyed, upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost, stolen or destroyed. When authorizing such issue of a new certificate, the Board of Directors may, in its discretion and as a condition precedent to the issuance thereof, require the owner of such lost, stolen or destroyed

certificate, or his legal representative, to advertise the same in such manner as the Board of Directors shall require and/or to give the Corporation a bond in such sum as it may direct as indemnity against any claim that may be made against the Corporation with respect to the certificate alleged to have been lost, stolen or destroyed.

Section 5.4 Transfers of Stock. Stock of the Corporation shall be transferable in the manner prescribed by applicable law and in these Bylaws. Transfers of stock shall be made on the books of the Corporation only by the record holder of such stock, or by their attorney lawfully constituted in writing, and, in the case of stock represented by a certificate, upon the surrender of the certificate.

Section 5.5 Stockholders of Record. In order that the Corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the Board of Directors may fix, in advance, a record date, which shall not be more than sixty (60) days nor less than ten (10) days before the date of such meeting, nor more than sixty days prior to any such other corporate action. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting.

Section 5.6 Beneficial Owners. The Corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, and to vote as such owner, and to hold liable for calls and assessments a person registered on its books as the owner of shares, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person, whether or not it shall have express or other notice thereof, except as otherwise provided by applicable law.

ARTICLE VI

Notices

Section 6.1 Manner of Notice.

(a) Except as otherwise provided by applicable law, the Certificate of Incorporation or these Bylaws, whenever notice is required to be given to any stockholder, director or member of any committee of the Board of Directors, such notice may be given by (i) personal delivery, (ii) depositing it, in a sealed envelope, in the United States mails, first class, postage prepaid, addressed, (iii) delivering to a company for overnight or second day mail or delivery, (iv) delivering it to a telegraph company, charges prepaid, for transmission, or by transmitting it via telecopier, or (v) any other reliable means permitted by applicable law (including, subject to Section 6.1(b) of these Bylaws, electronic transmission) to such stockholder, director or member, either at the address of such stockholder, director or member as it appears on the records of the Corporation or, in the case of such a director or member, at his or her business address; and such notice shall be deemed to be given at the time when it is thus personally delivered, deposited, delivered or transmitted, as the case may be. Such requirement for notice shall also be deemed

satisfied, except in the case of stockholder meetings, if actual notice is received orally or by other writing by the person entitled thereto as far in advance of the event with respect to which notice is being given as the minimum notice period required by applicable law or these Bylaws.

(b) Without limiting the foregoing, any notice to stockholders given by the Corporation pursuant to these Bylaws shall be effective if given by a form of electronic transmission consented to by the stockholder to whom the notice is given. Any such consent shall be revocable by the stockholder by written notice to the Corporation and shall also be deemed revoked if (1) the Corporation is unable to deliver by electronic transmission two consecutive notices given by the Corporation in accordance with such consent and (2) such inability becomes known to the Secretary, the transfer agent or other person responsible for the giving of notice; provided, however, that the inadvertent failure to treat such inability as a revocation shall not invalidate any meeting or other action. Notice given by a form of electronic transmission in accordance with these Bylaws shall be deemed given: (i) if by facsimile telecommunication, when directed to a number at which the stockholder has consented to receive notice; (ii) if by electronic mail, when directed to an electronic mail address at which the stockholder has consented to receive notice; (iii) if by a posting on an electronic network, together with separate notice to the stockholder of such specific posting, upon the later of such posting and the giving of such separate notice; and (iv) if by another form of electronic transmission, when directed to the stockholder.

Section 6.2 Dispensation with Notice.

(a) Whenever notice is required to be given by applicable law, the Certificate of Incorporation or these Bylaws to any stockholder to whom (i) notice of two consecutive annual meetings of stockholders, and all notices of meetings of stockholders to such stockholder during the period between such two consecutive annual meetings, or (ii) all, and at least two, payments (if sent by first class mail) of dividends or interest on securities of the Corporation during a 12-month period, have been mailed addressed to such stockholder at the address of such stockholder as shown on the records of the Corporation and have been returned undeliverable, the giving of such notice to such stockholder shall not be required. Any action or meeting which shall be taken or held without notice to such stockholder shall have the same force and effect as if such notice had been duly given. If any such stockholder shall deliver to the Corporation a written notice setting forth the then current address of such stockholder, the requirement that notice be given to such stockholder shall be reinstated.

(b) Whenever notice is required to be given by applicable law, the Certificate of Incorporation or these Bylaws to any person with whom communication is unlawful, the giving of such notice to such person shall not be required, and there shall be no duty to apply to any governmental authority or agency for a license or permit to give such notice to such person. Any action or meeting which shall be taken or held without notice to any such person with whom communication is unlawful shall have the same force and effect as if such notice had been duly given.

Section 6.3 Waiver of Notice. Any written waiver of notice, signed by the person entitled to notice, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting, at the

beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the stockholders, directors, or members of a committee or directors need be specified in any written waiver of notice.

ARTICLE VII

Indemnification

Section 7.1 Right to Indemnification.

(a) The Corporation shall indemnify and hold harmless, to the fullest extent permitted by applicable law as in effect on the date of adoption of these Bylaws or as it may thereafter be amended, each person (and the heirs, executors or administrators of such person) who was or is made or is threatened to be made a party or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (a "proceeding") by reason of the fact that such person is or was a director or officer of the Corporation or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture or other enterprise, against any and all liability and loss (including judgments, fines, penalties and amounts paid in settlement) suffered or incurred and expenses reasonably incurred by such person. The Corporation may, by action of the Board of Directors, provide indemnification to such of the employees and agents of the Corporation to such extent and to such effect as the Board of Directors shall determine to be appropriate and authorized by applicable law. The Corporation shall not be required to indemnify a person in connection with a proceeding initiated by such person, including a counterclaim or crossclaim, unless the proceeding was authorized by the Board of Directors.

(b) For purposes of this Article VII: (i) any reference to "other enterprise" shall include all plans, programs, policies, agreements, contracts and payroll practices and related trusts for the benefit of or relating to employees of the Corporation and its related entities ("employee benefit plans"); (ii) any reference to "fines", "penalties", "liability" and "expenses" shall include any excise taxes, penalties, claims, liabilities and reasonable expenses (including reasonable legal fees and related expenses) assessed against or incurred by a person with respect to any employee benefit plan; (iii) any reference to "serving at the request of the Corporation" shall include any service as a director, officer, employee or agent of the Corporation or trustee or administrator of any employee benefit plan which imposes duties on, or involves services by, such director, officer, employee or agent with respect to an employee benefit plan, its participants, beneficiaries, fiduciaries, administrators and service providers; (iv) any reference to serving at the request of the Corporation as a director, officer, employee or agent of a partnership or trust shall include service as a partner or trustee; and (v) a person who acted in good faith and in a manner he or she reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "not opposed to the best interests of the Corporation" for purposes of this Article VII.

Section 7.2 Prepayment of Expenses. The Corporation shall pay or reimburse the reasonable expenses incurred in defending any proceeding in advance of its final disposition if the Corporation has received an undertaking by the person receiving such payment or

reimbursement to repay all amounts advanced if it should be ultimately determined that he or she is not entitled to be indemnified under this Article VII or otherwise.

Section 7.3 Non-Exclusivity of Rights. The rights conferred on any person by this Article VII shall not be exclusive of any other rights which such person may otherwise have or hereafter acquire under any statute, provision of the Certificate of Incorporation, these Bylaws, agreement, vote of stockholders or disinterested directors or otherwise.

Section 7.4 Other Indemnification. The Corporation's obligation, if any, to indemnify any person who was or is serving at its request as a director, officer, employee, partner or agent of another corporation, partnership, joint venture or other enterprise shall be reduced by any amount such person may collect as indemnification from such other corporation, partnership, joint venture or other enterprise.

Section 7.5 Amendment or Repeal. Any repeal or modification of the foregoing provisions of this Article VII shall not adversely affect any right or protection hereunder of any person in respect of any act or omission occurring prior to the time of such repeal or modification.

ARTICLE VIII

General

Section 8.1 Fiscal year. The fiscal year of the Corporation shall be determined by resolution of the Board of Directors.

Section 8.2 Seal. The corporate seal shall have the name of the Corporation inscribed thereon and shall be in such form as may be approved from time to time by the Board of Directors.

Section 8.3 Definitions.

(a) For purposes of these Bylaws, "electronic transmission" means any form of communication, not directly involving the physical transmission of paper, that creates a record that may be retained, retrieved and reviewed by a recipient thereof, and that may be directly reproduced in paper form by such a recipient through an automated process.

(b) For purposes of these Bylaws, "public disclosure" shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press, Business Wire, PR Newswire or comparable national news service, or in a document publicly filed by the Corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the Exchange Act.

(c) For purposes of these Bylaws, a "qualified representative" of a stockholder shall mean a duly authorized officer, manager or partner of such stockholder or a person authorized by a writing executed by such stockholder or an electronic transmission delivered by such stockholder to act for such stockholder as proxy at the meeting of stockholders, which writing (or a reliable reproduction thereof) shall be produced at the meeting of stockholders.

(d) For purposes of these Bylaws, "Stockholder Associated Person" of any stockholder means (i) any person acting in concert with such stockholder, (ii) any beneficial owner of shares of stock of the Corporation owned of record or beneficially by such stockholder (other than a stockholder that is a depository) and (iii) any person that directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, such stockholder or such Stockholder Associated Person.

Section 8.4 Amendment of Bylaws. These Bylaws may be altered, amended or repealed, and new Bylaws made, by the affirmative vote of not less than seventy-five percent (75%) of the issued and outstanding shares entitled to vote generally in the election of directors. These Bylaws may also be altered, amended or repealed, and new Bylaws made, by the affirmative vote of not less than seventy-five percent (75%) of the members of the Board of Directors.