

**BY-LAWS
OF
PROPIONIC ACIDEMIA FOUNDATION**

ARTICLE I

Name

SECTION 1.1 The name of the corporation shall be the Propionic Acidemia Foundation, an Illinois not-for-profit corporation (the "Corporation").

ARTICLE II

Membership

SECTION 2.1 No Members. The Corporation shall have no members.

SECTION 2.2 Voting. All voting rights shall be vested in the Board of Directors. In case of a tie, the President will be responsible for breaking the tie.

ARTICLE III

Board of Directors

SECTION 3.1 General Powers and Duties. The property, business and affairs of the Corporation shall be managed by its Board of Directors.

SECTION 3.2 Number, Election and Term of Office. The Board of Directors shall consist of not more than eight (8) nor less than (3) directors, the exact number to be fixed from time to time by resolution of the Board of Directors. Directors shall be elected by the Board of Directors to hold office for one (1) year and until their successors shall have been elected and qualified or until their death, resignation, or removal. Directors need not be residents of Illinois.

SECTION 3.3 Resignations. Any Director may resign at any time by giving written notice to the Board of Directors or the Secretary of the Corporation. Such resignation shall take effect when the notice is delivered unless the notice specifies a future date; and, unless otherwise specified therein, the acceptance of such resignation shall not be necessary to make it effective.

SECTION 3.4 Vacancies. Any vacancy occurring in the Board of Directors, or any directorship to be filled by reason of an increase in the number of Directors, may be filled by the Board of Directors at the annual meeting, any regular meeting, or at a special meeting of the Board of Directors called for that purpose. Each Director elected to fill a vacancy shall hold office for the unexpired term of his predecessor in office.

SECTION 3.5 Annual Meetings. The annual meeting of the Board of Directors shall be held without notice other than this bylaw before December 31 each year at the office of the Corporation, or at such other place determined by the Board of Directors.

SECTION 3.6 Regular Meetings. The Board of Directors shall hold regular meetings at such place and at such times as may be designated by resolution of the Board of Directors, without notice other than such resolution.

SECTION 3.7 Special Meetings. Special meetings of the Board of Directors may be held at any time on the call of the President or by the request in writing of any two (2) of the Directors. Special meetings of the Board of Directors may be held at such place, either within or without the State of Illinois, as shall be specified or fixed in the call for such meeting or notice.

SECTION 3.8 Notice of Meetings. Notice of each special meeting shall be delivered by or at the direction of the Secretary to each Director at least five (5) days before the day on which the meeting is to be held. Notice may be waived in writing by a Director, either before or after the meeting. Attendance of a Director at any meeting shall constitute a waiver of notice of such meeting except where the Director attends the meeting for the express purpose of objecting 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 special meeting of the Board of Directors need be specified in the notice or waiver of notice of such meeting.

SECTION 3.9 Quorum. Two (2) of the then current Board of Directors shall constitute a quorum for the transaction of business at any meeting of the Board of Directors; provided, however, that, if the members of the then current Board of Directors number seven (7) or eight (8), then three (3) of the Directors shall constitute a quorum. The act of a majority of the Directors present at the meeting at which a quorum is present shall be the act of the Board of Directors unless the act of a greater number is required by law, the Articles of Incorporation, or these Bylaws.

SECTION 3.10 Participation at Meetings by Conference Telephone. Directors may participate in and act at any meeting of the Board of Directors through the use of a conference telephone or other communications equipment by means of which all persons participating in the meeting can communicate with each other. Participation in such meeting shall constitute attendance and presence in person at the meeting of the person or persons so participating.

SECTION 3.11 Informal Action. Any action required to or which may be taken at a meeting of the Board of Directors may be taken without a meeting if a consent in writing setting forth the action so taken, is signed by all the Directors.

SECTION 3.12 Removal. One or more of the Directors may be removed, without cause, at a meeting of the Directors by the affirmative vote of a majority of the votes present and voted, either in person or by proxy. Written notice of such meeting shall be delivered to all Directors. Such notice shall state that a purpose of the meeting is to vote upon the removal of one or more Directors named in the notices, and only the named Director or Directors may be removed at such meeting.

ARTICLE IV

Officers

SECTION 4.1 Designation, Election and Term of Office. The officers of the Corporation shall consist of a President, a Secretary, a Treasurer, and such other officers and assistant officers as the Board of Directors may authorize. The officers shall be elected by the Board of Directors at its annual meeting, to hold office for one year and until their successors have been duly elected and qualified, or until their death, resignation or removal. Any two (2) or more offices may be held by the same person; provided, however, that the same person shall not hold the office of President and Treasurer.

SECTION 4.2 The President. The President shall be the Chief Executive Officer of the Corporation and shall preside at all meetings of the Board of Directors. The President shall have general and active management of the business of the Corporation; shall see that all orders and resolutions of the Board of Directors are carried into effect; shall execute the bonds, mortgages and other contracts requiring a seal under the seal of the Corporation; shall have general superintendence of all other officers of the Corporation; shall see that their duties are properly performed; shall from time to time report to the Board of Directors all matters within his knowledge which the interests of the Corporation may require to be brought to their notice; and shall also perform such other duties as may be assigned from time to time by the Board of Directors.

SECTION 4.3 The Secretary. The Secretary shall act as Secretary of the Board of Directors, shall give, or cause to be given, notice of all meetings of the Board of Directors and the members, unless notice thereof be waived, shall supervise the custody of all records and reports and shall be responsible for the keeping and reporting of adequate records of all meetings of the Board of Directors and the members. In addition, the Secretary shall be the custodian of the seal of the Corporation. The Secretary shall also perform such other duties as may be assigned to him or her from time to time by the Board of Directors. In the absence of the President, or in the event of his or her inability or refusal to act, the Secretary shall perform all the duties of the President, and when so acting shall have all the powers of, and be subject to all the restrictions on, the President.

SECTION 4.4 The Treasurer. The Treasurer shall keep full and correct account of receipts and disbursements in the books belonging to the Corporation; shall deposit all moneys and other valuable effects in the name and to the credit of the Corporation, in such banks of deposit as may be designated by the Board of Directors; shall dispose of funds of the Corporation as may be ordered by the Board, taking proper vouchers for such disbursements and shall render to the President and the Board of Directors, whenever so required, an account of all transactions as Treasurer and the financial condition of the Corporation. The Treasurer shall also perform such other duties as may be assigned from time to time by the Board of Directors.

SECTION 4.5 Resignation. Any officer may resign at any time by giving written notice to the Board of Directors or to the President or Secretary of the Corporation. Any such resignation shall take effect at the time specified therein; and, unless otherwise specified therein, the acceptance of such resignation shall not be necessary to make it effective.

SECTION 4.6 Removal. Any of the officers of the Corporation may be removed by the Board of Directors, but such removal shall be without prejudice to the contract rights, if any, of the person so removed. Election or appointment of an officer shall not of itself create any contract rights.

SECTION 4.7 Vacancies. Any vacancy in any office because of death, resignation, removal, disqualification or any other cause, shall be filled by the Board of Directors at an annual or regular meeting or at a special meeting called for such purpose.

ARTICLE V

Committees

SECTION 5.1 Committees. The Board of Directors, by resolution adopted by a majority of the Directors in office, may create one or more committees and appoint Directors or other such persons as the Board of Directors designates to serve on the committee or committees. Each committee shall have one or more Directors, a majority of its membership shall be Directors and all committee members shall serve at the pleasure of the Board of Directors. To the extent specified by the Board of Directors, each committee may exercise the authority of the Board of Directors in the management of the Corporation; provided, however, that a committee may not:

- A. Adopt a plan for the distribution of the assets of the Corporation or for dissolution;
- B. Fill vacancies on the Board of Directors or on any committees designated by the Board of Directors;
- C. Elect, appoint or remove any officer or Director or member of any committee, or fix the compensation of any member of a committee;
- D. Adopt, amend or repeal the Bylaws or the Articles of Incorporation of the Corporation;
- E. Adopt a plan of merger or adopt a plan of consolidation with another corporation.;
- F. Authorize the sale, lease, exchange or mortgage of all or substantially all of the property or assets of the Corporation; or
- G. Amend, alter, repeal or take any action inconsistent with any resolution or action of the Board of Directors when the resolution or action of the Board of Directors provides by its terms that it shall not be amended, altered or repealed by action of a committee.

SECTION 5.2 Quorum. Unless the appointment by the Board of Directors requires a greater number, a majority of any committee shall constitute a quorum for committee action at any meeting of the committee, and the act of a majority of committee members present and voting at a meeting at which a quorum is present shall be the act of the committee.

SECTION 5.3 Participation at Meetings by Conference Telephone. Committee members may participate in and act at any committee meeting through the use of a conference telephone or other communications equipment by means of which all persons participating in the meeting can communicate with each other. Participation in such meeting shall constitute attendance and presence in person at the meeting of the person or persons so participating.

SECTION 5.4 Meetings of Committees. Subject to action by the Board of Directors, each committee by majority vote of its members shall determine the time and place of meetings and the notice required therefore.

SECTION 5.5 Informal Action. Any action required to or which may be taken at a meeting of a committee may be taken without a meeting if a consent in writing, setting forth the action so taken, is signed by all of the committee members.

SECTION 5.6 Other Bodies. The Board of Directors may create and appoint persons to a commission, advisory body or other such body which may or may not have Directors as members. Any such commission, advisory body or other body may not act on behalf of the Corporation or bind the Corporation to any action but may make recommendations to the Board of Directors or to the officers of the Corporation.

ARTICLE VI

Indemnification of Directors, Officers, Employees and Agents; Insurance.

SECTION 6.1 Actions Other Than Actions by or in the Right of the Corporation. Subject to the limitations set forth in Section 6.8 and, to the extent applicable, Section 10.3 of these Bylaws, the Corporation shall indemnify any person who was or is a party, or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the Corporation) by reason of the fact that he is or was a Director, officer, employee or agent of the Corporation, or who is or was serving at the request of the Corporation as a Director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, if such person acted in good faith and in a manner he reasonably believed to be in, or not opposed to the best interest of the Corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that such person did not act in good faith and in a manner which he reasonably believed to be in or not opposed to the best interests of the Corporation or, with respect to any criminal action or proceeding, had reasonable cause to believe that his conduct was unlawful.

SECTION 6.2 Actions Brought in the Right of the Corporation. Subject to the limitations set forth in Section 6.8 and, to the extent applicable, Section 10.3 of these Bylaws, the Corporation

shall indemnify any person who was or is a party, or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the Corporation to procure a judgment in its favor by reason of the fact that such person is or was a Director, officer, employee, or agent 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, trust or other enterprise, against expenses (including attorneys' fees) actually and reasonable incurred by such person in connection with the defense or settlement of such action or suit, if such person acted in good faith and in a manner he reasonably believed to be in, or not opposed to the best interests of the Corporation, provided that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable for negligence or misconduct in the performance of his duty to the Corporation, unless and only to the extent that the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability, but in view of all the circumstances of the case, such person is fairly and reasonably entitle to indemnity for such expenses as the court shall deem proper.

SECTION 6.3 Expenses. Subject to the limitations set forth in Section 6.8 and to the extent applicable, Section 10.3 of these Bylaws, to the extent that a Director, officer, employee or agent of the Corporation has been successful, on the merits or otherwise in the defense of any action, suit or proceeding referred to in Sections 6.1 or 6.2 of these Bylaws or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith.

SECTION 6.4 Authorization of Indemnification. Any indemnification under Sections 6.1 or 6.2 of these Bylaws (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, employee or agent is proper in the circumstances because he has met the applicable standard of conduct set forth in Sections 6.1 or 6.2 of these Bylaws. Such determination shall be made: (a) by the Board of Directors by a majority vote of a quorum consisting of Directors who were not parties to such action, suit or proceeding; or (b) if such quorum is not obtainable or even if obtainable, if a quorum of disinterested Directors so directs, by independent legal counsel in a written opinion.

SECTION 6.5 Payment of Expenses in Advance. Expenses incurred in defending a civil or criminal action, suit, or proceeding may be paid by the Corporation in advance of the final disposition of such action, suit or proceeding, as authorized by the Board of Directors in the specific case, upon receipt of an undertaking by or on behalf of the Director, officer, employee or agent to repay such amount, unless it shall ultimately be determined that he is entitled to be indemnified as authorized in this Article VI.

SECTION 6.6 Right Not Exclusive. The indemnification provided by this Article VI shall not be deemed exclusive of any other rights to which those seeking indemnification may be entitled under any agreement, vote of disinterested Directors, or otherwise, both as to action in his official capacity and as to action in another capacity while holding such office, and shall continue as to a person who has ceased to be a Director, officer, employee or agent, and shall inure to the benefit of the heirs, ex3cutros and administrators of such a person.

SECTION 6.7 Insurance. The Corporation may purchase and maintain insurance on behalf of any person who is or was a Director, officer, employee or agent of the Corporation, or who is or was serving at the request of the Corporation as a Director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against any liability asserted against such person and incurred by such person in any such capacity, or arising out of his status as such, whether or not the Corporation would have the power to indemnify such person against such liability under the provisions of this Article VI.

SECTION 6.8 Limitation. Notwithstanding any other provision in these Bylaws, the Corporation shall not pay the expenses of, reimburse, or indemnify any person, and shall not pay premiums on insurance to provide for the reimbursement or indemnification of any person, if such action with respect to such person would constitute an act of self-dealing under Section 4941(d) of the Internal Revenue Code of 1986, or under a corresponding provision of any subsequent Federal tax law. This section applies to, without limitation, the payment, reimbursement or indemnification of expenses with respect to the defense of an officer, director, or employee of the Corporation in a criminal proceeding in cases in which such actions would constitute an act of self-dealing.

ARTICLE VII

Miscellaneous Provisions

SECTION 7.1 Principal Office. The principal office of the Corporation in the State of Illinois shall be located at 1963 McCraren Road, Highland Park, IL 60035.

SECTION 7.2 Corporate Seal. In the event that the Corporation possesses a corporate seal, the corporate seal of the Corporation shall be circular in form, bearing the name of the Corporation and the word "ILLINOIS" in the marginal circle, and the words "Corporate Seal" in the inner circle. Said seal may be used by causing it or a facsimile or equivalent thereof to be impressed or affixed or reproduced.

SECTION 7.3 Depositories. All funds of the Corporation not otherwise employed shall be deposited from time to time to the credit of the Corporation in such banks, trust companies or other depositories as the Board of Directors may designate.

SECTION 7.4 Checks, Drafts, Notes, Etc. All checks, drafts or other orders for the payment of money and all notes or other evidences of indebtedness issued in the name of the Corporation shall be signed by such officer or officers, or agent or agents of the Corporation and in such manner as shall from time to time be determined by resolution of the Board of Directors.

SECTION 7.5 Fiscal Year. The fiscal year of the Corporation shall end on the 31st of July of each year.

SECTION 7.6 Delivery of Notice. Any notices required to be delivered pursuant to these Bylaws shall be deemed to be delivered when transferred or presented in person or deposited in

the United States mail addressed to the person at his, her, or its address as it appears on the records of the Corporation, with sufficient first-class postage prepaid thereon.

ARTICLE VIII

Amendments

SECTION 8.1 Method of Amendment. These Bylaws may be altered, amended, or repealed, and new and other Bylaws may be made and adopted at any annual or regular meeting of the Board of Directors, or at any special meeting called for that Purpose, by the affirmative vote of a majority of the Directors in office.

ARTICLE IX

Distribution

SECTION 9.1 Distributions. The Board of Directors of the Corporation may authorize, and the Corporation may make, distributions of its money, property or other assets, other than upon dissolution and final liquidation, subject to the limitations of Section 9.4 of these Bylaws, only:

- (a) To any person or organization who or that has made payments to the Corporation for goods or services, as a fractional repayment for such payments, provided all such persons or organizations in any category are repaid on an equal pro rata basis; or
- (b) To any person or organization as a repayment of his, her or its contribution of an amount not to exceed the amount of the contribution, provided that any assets held for any charitable, religious, benevolent, educational or similar purpose or held upon a condition requiring return, shall continue to be so restricted.

SECTION 9.2 Payments in Furtherance of Purposes. Any payment or transfer of money, property or other assets in furtherance of any of the purposes of the Corporation shall not be deemed a distribution for the purposes of this Article IX and this Article VIII shall not be construed as limiting the purposes and powers of the Corporation.

SECTION 9.3 Determination of Distributions. All distributions by the Corporation permitted by this Article IX shall be at the option of the Corporation only and at such amount or amounts, within the period or periods, and on such terms and conditions, not inconsistent with the purpose of the Corporation and statute, as are fixed by the Board of Directors of the Corporation.

SECTION 9.4 Limitation on Distributions. No distribution under Section 9.1 of these Bylaws may be made if, after giving it effect:

- (a) The Corporation would be insolvent; or
- (b) The net assets of the Corporation would be less than zero; or
- (c) The Corporation would be rendered unable to carry on its corporate purposes.

ARTICLE X

Restrictions on Activities

SECTION 10.1 Effectiveness of Provisions in Article X. The provisions of this Article X shall not be effective or binding upon the Corporation, its Board of Directors, or its officers to the extent that the organization is determined not to be a private foundation or private operating foundation subject to the provisions of Chapter 42 of the Internal Revenue Code of 1986, or to the corresponding provisions of any subsequent Federal tax law.

SECTION 10.2 Investments. Unless otherwise specified by the terms of a particular gift, bequest or devise, grant or other instrument, the funds of the Corporation may be invested, from time to time, in such manner as the Board of Directors may deem advantageous without regard to restrictions applicable to trustees or trust funds; provided, however:

- (a) the Corporation shall not retain any excess business holdings as defined in Section 4943(c) of the Internal Revenue Code of 1986, or corresponding provisions of any subsequent Federal tax law; and
- (b) the Corporation shall not make any investments as to subject it to tax under Section 4944 of the Internal Revenue Code of 1986, or corresponding provisions of any subsequent Federal tax law.

SECTION 10.3 Self-Dealing. The Corporation shall not engage in any act of self-dealing as defined in Section 4941(d) of the Internal Revenue Code of 1986, or corresponding provisions of any subsequent Federal tax law.

SECTION 10.4 Distribution of Income. The Corporation shall distribute its income for each taxable year at such time and in such manner as not to become subject to the tax on undistributed income imposed by Section 4942 of the Internal Revenue Code of 1986, or corresponding provisions of any subsequent Federal tax law.

SECTION 10.5 Certain Expenditures. The Corporation shall not make any taxable expenditures as defined in Section 4945(d) of the Internal Revenue Code of 1986, or corresponding provisions of any subsequent Federal tax law.

The foregoing By-Laws of the Propionic Acidemia Foundation, as revised, were adopted by the unanimous approval of the Directors at the Annual Meeting held on the 21st day of December 2007, as attested by their individual signatures below.

Revised 2007

Exhibit A
ATTACHMENT TO THE
ARTICLES OF INCORPORATION OF
PROPIONIC ACIDEMIA FOUNDATION

ARTICLE 4 – Corporate Purposes

The purposes for which the Propionic Acidemia Foundation (the “Corporation”) is organized are charitable and educational purposes, including, but not limited to, raising funds for, and disseminating information with respect to, research related to diagnosis, treatment, cure and prevention of propionic acidemia and making grants to other organizations involved with families affected by propionic acidemia, but only to the extent and in such manner that such purposes constitute exclusively charitable and educational purposes within the meaning of sections 501(c)(3) and 170(2)(B) of the Internal Revenue Code of 1986 as amended, or the corresponding provisions of any subsequent Federal tax law (hereinafter referred to as the (“Code”).

No part of the net earnings or assets of the Corporation shall inure to the benefit of, or be distributable to, its members, directors or officers or other private persons (except that the Corporation shall be authorized and empowered to pay reasonable compensation for services rendered to and reimbursement of expenses incurred on behalf of the Corporation and to make payments and distributions in furtherance of its purposes as set forth in these Articles of Incorporation.) No substantial part of the activities of the Corporation shall be the carrying on of propaganda, or otherwise attempting to influence legislation, and the Corporation shall not participate in, or intervene in (including the publishing or distributing of statements) any political campaign on behalf of or in opposition to any candidate for public office.

Notwithstanding any other provision of these Articles of Incorporation or the laws of any jurisdiction otherwise applicable, the Corporation shall not carry on any activities not permitted to be carried on and shall not make any distribution not permitted to be made (a) by an organization exempt from Federal income tax under section 501(c)(3) of the Code, or (b) by an organization, contributions to which are deductible under section 170(c)(2) of the code.

Upon the dissolution of the Corporation, the Board of Directors shall, after paying or making provisions for the payment of all the liabilities of the Corporation, dispose of all the assets of the Corporation exclusively to organizations organized and operated exclusively for charitable and educational purposes as shall at the time qualify as an exempt organization or organizations under section 501(c)(3) of the Code, as the Board of Directors shall determine. Any such assets not so disposed of shall be disposed of by the Court of Common Pleas of the county in which the principal office of the Corporation is then located, exclusively for such purposes or to such organization or organizations as said court shall determine.