

AMENDED AND RESTATED BY-LAWS

OF

THE INTERNATIONAL SOCIETY OF PHARMACOMETRICS, INC.

Adopted as of February 5, 2016

ARTICLE ONE

NAME, LOCATION, PURPOSE

1.1. Name. The name of the organization is The International Society of Pharmacometrics, Inc. (hereinafter the "Corporation" or "ISoP"). It shall be a nonprofit organization incorporated under the New Jersey Nonprofit Corporation Act (the "Act").

1.2 Principal Office. The principal office of the Corporation shall be in the State of New Jersey at such location as the Board of Directors of the Corporation (the "Board") shall determine from time to time. The Corporation may also have such other offices within or without the State of New Jersey as the Board shall determine from time to time.

1.3. General Purpose. The Corporation is organized and shall be operated for purposes within the meaning of section 501(c)(6) of the Internal Revenue Code of 1986 (the "Code"). The references in this Article and subsequent Articles to particular sections of the Code in effect as of the date of this document shall be deemed to include corresponding provisions of any subsequent federal tax laws. Without limiting the foregoing, the primary purpose of the Corporation is to promote and advance the discipline of the science of pharmacometrics, through Integration, Innovation, and Impact: quantitative integration of multisource data and knowledge of clinical, biomedical, biological, engineering, statistical, and mathematical concepts, resulting in continuous methodological and technological innovation enhancing scientific understanding and knowledge, which in turn has an impact on discovery, research, development, approval, and utilization of new therapies. The vision of ISoP is to promote and advance the discipline of Pharmacometrics and broaden its impact. Consistent with its primary purpose, the Corporation shall:

- a) Serve as the sponsoring organization for international conferences on Pharmacometrics such as the American Conference on Pharmacometrics (ACoP);
- b) Offer a central organization for the integration of national and international Pharmacometrics communities, initiatives, consortia, and educational activities;
- c) Actively partner with other scientific and medical disciplines and organizations; and
- d) Provide resources, mentoring, leadership opportunities, and educational services to its members.

ARTICLE TWO

MEMBERSHIP

2.1. Qualifications for Membership. The Members of ISoP shall consist of such persons who meet the requirements for membership as provided in these By-laws. No member shall have any right, title, or interest in any of the property or assets, including any earnings or investment income of the Corporation, nor shall any of such property or assets be distributed to any Member on its dissolution or winding up. Specifically, the Members of ISoP shall consist of such persons who:

- a) Apply for Membership or Trainee Membership on the appropriate form;
- b) Subscribe to the mission of ISoP;
- c) Pay the Membership Dues as provided herein;
- d) Agree to abide by the By-laws of ISoP as amended from time to time; and
- e) Are accepted after the prospective Member's membership application has been reviewed by the ISoP Membership Committee to insure that the applicant meets the requirements for ISoP membership as outlined in this Article. The decision regarding acceptance or rejection of the application shall be communicated to the candidate within two (2) months of the Membership Committee meeting. Election to membership shall rest in the discretion of the Board.

The Corporation reserves the right to alter, amend or add to these membership qualifications at its discretion, by a resolution of the Board adopted by a majority vote of the directors present at a meeting at which a quorum is present.

2.2. Classes of Members. The membership of ISoP shall be divided into two classes: Members and Trainee Members, as set forth below. Both classes shall be considered a Member for voting, meeting, termination, and quorum purposes, and for membership dues timelines for payment and renewal.

- a) MEMBER: Individuals who have earned the equivalent of a bachelor's degree or higher in any field related to pharmacometrics and its supporting disciplines, such as: pharmaceutical, biomedical, biological, engineering, statistical, economic, and/or mathematical sciences.
- b) TRAINEE MEMBER: This class of membership is designed for persons pursuing a bachelor's, masters, doctoral degree, or postdoctoral fellowship and who have an interest in pharmacometrics. Candidates for this class of membership will provide ISoP with written evidence of their training category from the institutions involved.

2.3. Voting Rights. Each Member in good standing shall be entitled to cast one (1) vote with respect to those matters submitted to the Members for action or approval. There shall not be any voting of Members by proxy. Votes may be taken by voice, by a show of hands or by written or electronic ballot. Voting Members shall not have the right to cumulate their votes.

2.4. Membership Dues. All Members shall pay annual membership dues to ISoP in such amounts and in such manner as the Board determines from time to time. Each year the Board shall specify a date, and give all Members prior written notice thereof, when membership dues are due, and permit Members to pay their dues at any time within sixty-one (61) days thereafter.

2.5. Meetings of Members. The annual meeting of the ISoP Members shall be held at such time and place as may be determined by the Board, generally in September or October of each year. Additional meetings of the Members may be held at such times and places as may be determined by the Board from time to time. Meetings of members may be held at such places as may be fixed in the notice of the meeting. At such meetings the Directors of ISoP

may be elected. Special meetings of the Members for any purpose or purposes may be called at any time by the President or by a majority of the Directors. All Members in good standing shall be entitled to have notice of, to attend and to participate in all meetings and activities of the Corporation established as membership activities by the Board, subject to the rights and limitations on voting as forth in Section 2.3 of this Article.

2.6. Notice of Meetings of Members. Notice of any meeting of Members shall be given to each Member either personally, by prepaid mail, by facsimile transmission, by electronic mail, or by other electronic means, addressed to each Member at the address appearing on the books of the corporation. Such notices shall be sent not less than ten (10) and not more than sixty (60) days before any meeting, and shall specify the place, day and hour of the meeting and shall state the general purpose and nature of the business to be considered in such meeting. If sent via prepaid mail, such notice is given when deposited in the United States mail, postage prepaid, directed to the Member at the address provided by the Member to the Corporation, as the same may be updated by the Member from time to time. If sent via electronic mail or by other electronic means, such notice is given when directed to the Member at the electronic address as provided by the Member to the Corporation, as the same may be updated by the Member from time to time. An affidavit of the secretary or an assistant secretary (if any) that the notice has been given shall, in the absence of fraud, be prima facie evidence of the facts stated therein.

2.7. Waiver of Notice. Whenever notice is required to be given by law, the Certificate of Incorporation or these by-laws, notice of any meeting need not be given to any Member who signs a written waiver of notice, whether before or after the meeting. The attendance at a meeting without protesting prior to the conclusion of the meeting the lack of notice of the meeting shall constitute a waiver of notice by that Member, 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 Members need be specified in any written waiver of notice.

2.8. Quorum. The presence of thirty percent (30%) of the Members of the Corporation either physically, by electronic means or by completed ballot by member received by the specified voting date and time shall constitute a quorum. The Members present in person at such meeting may continue to do business until adjournment, notwithstanding the

withdrawal of enough Members to leave less than a quorum. Whether or not a quorum is present, the meeting may be adjourned by a vote of the Members present.

2.9. Voting by Mail or Electronic Means. If so determined, ballots shall be delivered to all voting Members not more than sixty (60) days and no less than twenty (20) days before the specified voting date. To be valid, ballots must be completed, mailed (or otherwise delivered) to ISoP and received by the specified voting date.

2.10. Termination of Membership. Membership in the Corporation is nontransferable. The membership of each Member of ISoP will terminate upon the Member's death, voluntary withdrawal, failure to pay dues as herein described, or upon expulsion of a Member in accordance with these by-laws. A Member may voluntarily withdraw from the Corporation at any time by providing written notice of withdrawal to the Secretary of the Corporation (any resignation to take effect as specified therein or, if not specified, upon receipt by the Secretary). Unless otherwise determined by the Board, each Member's membership will immediately terminate if his or her membership dues have not been paid within sixty-one (61) days after such Member's dues were due. A Member may be temporarily suspended from good standing status during such period as he or she may temporarily fail to meet eligibility requirements for membership or become deficient in the payment of Corporation dues or assessments. A Member shall be expelled from membership and lose all standing in the Corporation for good cause relating to the maintenance of the integrity of the Corporation, as determined by the Board. Suspension or expulsion shall only occur upon action of the Board and after the Member has been given notice and the opportunity to be heard. Proceedings to terminate the membership of any Member shall be commenced by a resolution of the Board adopted by a majority of the directors present at a meeting at which a quorum is present. Such resolution shall specify the act or acts alleged as the basis for such involuntary termination of membership. The person against whom such proceedings are brought shall be promptly furnished with a copy of such resolution and shall be afforded an opportunity for a hearing before the Board with respect to the truth or falsity of the charges. Such hearing shall take place not less than sixty (60) days after such notification. After the conclusion of the hearing the Board shall make its decision in the matter, which shall be final; provided, however, that a decision to terminate membership shall not be effective unless approved by at least three-fourths (3/4) of the directors present at a meeting at which a quorum is present. No person against whom proceedings for termination of membership shall be brought shall be entitled to vote on any matter in connection therewith. The Board may temporarily suspend a Member upon its ex-parte finding of probable

cause to do so, provided that such member shall immediately be given notice and a hearing thereon afforded to the Member within seven (7) business days of such suspension, in default of which the suspension shall be void. A hearing will not be required for a temporary suspension arising from non-payment of dues. The Board may, on application of the expelled Member, reinstate the expelled Member if the Board concludes that the Member has corrected, rectified, resolved or otherwise eliminated the event(s) or condition(s) leading to the expulsion. The Board must find that the expelled Member then meets all eligibility requirements for membership, and that reinstatement shall not adversely reflect upon the integrity or reputation of the Corporation or its Members. All rights, powers, privileges, obligations or duties of a Member as such Member of the Corporation shall cease on the termination of his or her membership, unless otherwise provided by law. A Member whose membership has been terminated may request to be reinstated in the same manner as initial appointments of Members are made.

2.11. Trainee Member Renewal. Upon membership renewal, to maintain Trainee Member status, Trainee Members must provide ISoP with written evidence of their continued enrollment at the institutions involved.

ARTICLE THREE **FELLOWSHIPS**

3.1. Applications. There shall be Fellows of ISoP. Fellows must be ISoP Members in good standing who have demonstrated evidence of significant and sustained contributions to the promotion and advancement of pharmacometrics. Only a Fellow of the International Society of Pharmacometrics shall be privileged to use the letters "FISOP" after his or her name. Applications for ISoP Fellowship shall be submitted on the appropriate form and must include current curriculum vitae and two (2) letters of recommendation from ISoP Members in good standing. The ISoP Awards Committee shall review the application and supporting materials. The decision regarding acceptance or rejection of the Fellowship application shall be communicated to the candidate within four (4) weeks of the Awards. The number of Fellows selected each year, if any, shall be up to the Board of Directors.

3.2. Requirements. ISoP Fellows are expected to have demonstrated evidence of significant and sustained contributions to the promotion and advancement of Pharmacometrics, according to the following criteria:

- a) Contributing to the field of Pharmacometrics for at least ten (10) years after completion of training;
- b) At least five (5) peer reviewed articles relevant to Pharmacometrics. Weight will be given to the prestige of the journal in the scientific community, order of authorship, and time span in which the articles were published;
- c) National or international recognition in the field of Pharmacometrics; and
- d) At least three (3) years of membership in ISoP, contributing active leadership to ISoP of at least one (1) year.

ARTICLE FOUR
BOARD OF DIRECTORS

4.1. Powers. Subject to any limitations of the Articles of Incorporation, the Act and these By-laws, all corporate powers shall be exercised by, or under the authority of, and the business and affairs of the Corporation shall be controlled by the Board of Directors. Without prejudice to such general powers, but subject to the same limitations, it is hereby expressly declared that the Directors shall have the following powers:

- a) Transact all detailed business required to fulfill the purpose and objectives of ISoP.
- b) Regulate and conserve the property interests of ISoP.
- c) Approve or disapprove the recommendations of Standing Committees.
- d) Be responsible for all expenditures of ISoP.
- e) Determine annual dues for Members.

Adopt, as necessary, procedural rules and regulations for the election of Members including the initiation or withdrawal of additional classes or qualifications for membership.

- g) Create, dissolve or change Committees and appoint their chairpersons.

- h) Elect or confirm the appointment of the Editor of ISoP-related journals and approve recommendations of the Editor and the Publications Committee on matters of policy concerning journals, their format, content, advertising, circulation and publication.

Transact all business not otherwise provided for in these By-Laws and delegate to the Executive Director the authority necessary to conduct the ongoing administrative functions of ISoP as may be necessary for continuity and good order.

4.2. Number of Directors. The number of Directors constituting the entire Board shall be a minimum of seven (7) and a maximum of eleven (11), as fixed by resolution of the Board. Subject to the foregoing, the number of Directors may be determined from time to time by action of the Board, provided that any action by the Board to effect such increase above the maximum or decrease below the minimum shall require the vote of at least two-thirds (2/3) of all Directors then in office. No decrease in the number of Directors shall shorten the term of any Director then in office.

4.3. Nomination. Nominees for new members of the Board of Directors shall be prepared by the Nominations Committee, at least one of whom shall be a member of the Board of Directors. The Nominations Committee shall submit a slate of Nominees to the Board of Directors for review and approval.

4.4. Election. All Directors shall be elected by the Members of ISoP. Each year, or as determined by the Board of Directors, election of Directors by voting of Members of ISoP may take place by mail or electronic means prior to the Annual Meeting of the Members. The Directors shall be divided into three groups, Group A, Group B, and Group C, and except as otherwise provided in this Section 4.4, the term of office of each Director shall be for three (3) years from the date of election and thereafter until his or her successor has been elected and qualified. The number of Directors in each class shall be fixed by the Board prior to its Annual Meeting and shall be equal in number to the nearest extent possible. The purpose of the three groups is to provide a mechanism for structured rotation of the members of the Board of Directors. Directors shall be elected annually as necessary to fill the vacancies of the group of Directors whose terms are then ending. In the event there is no vacancy on the Board of Directors due to a hold over of a Director then serving as an officer, as herein provided, then no

election shall be necessary for that year. The term of each Director, upon being elected to office, shall begin at the beginning of the next fiscal year. Except as provided below, Directors so elected shall hold office until the third successive fiscal year after their election and until their successors shall have been elected and qualified, so that the term of office of one (1) class of Directors shall expire each year. Directors may not be elected or appointed to two successive terms. Election to fill a vacancy for an unexpired term shall not be taken into account in determining the limitations on consecutive terms set forth in this Article. A Director who has served all or part of their term of office shall be ineligible for re-election for two (2) years. However, if a Director becomes an officer, he or she shall remain on the Board and be eligible for re-election until the person has completed his or her term as an officer. All Directors shall hold office until the expiration of the term for which each was elected, until a successor has been duly elected and qualified, or until the Director's prior resignation or removal as hereinafter provided.

4.5. Quorum. A minimum of two-thirds (2/3) of the Members of the Board of Directors shall constitute a quorum for the transaction of business at any regular or special meeting of the Board.

4.6. Meetings. Regular meetings of the Board of Directors shall be held three (3) times per year. Specific dates for Directors meetings shall be determined by the President and communicated by the Executive Office. Special meetings may be convened at any time upon call by the President, by a majority vote of the Executive Committee, or by a written request of two-thirds (2/3) of the Members of the Board of Directors. Meetings of the Board of Directors shall be conducted in accordance with Parliamentary Procedures.

4.7. Resignation. Any Director may resign from office at any time by giving written notice thereof to an Officer of the Corporation.

4.8. Removal. Any Director may be removed for cause by a two-thirds (2/3) vote of all of the other Directors then in office. Cause for removal exists (without limiting other causes for removal) whenever a Director

- a) Fails to attend three (3) consecutive regular meetings of the Board, notwithstanding that he or she otherwise qualifies for office. Attendance may be in person or by telephone or other electronic means. A Director who misses two

(2) consecutive meetings without extenuating circumstances or providing input with regard to the agenda materials will be contacted by the President to express concern. If three consecutive meetings are missed, voluntary resignation will be requested;

- b) Is convicted of a felony;
- c) Has committed a material breach of his or her fiduciary duty;
- d) Has committed an act of moral turpitude; or
- e) Ceases to be a Member in good standing of ISoP while serving as a Director.

4.9. Vacancies. In the event of a vacancy on the Board occurring within three (3) months after the Directors election, the candidate with the next highest number of votes in the most recent Directors election will be appointed to serve a full term. After three (3) months after the Directors election, any vacancy occurring on the Board may be filled by a vote of the majority of the remaining Directors. A Director so chosen shall serve for the balance of the unexpired term of the vacant office. If the Board accepts the resignation of a Director, tendered to take effect at a future time, the Board may elect a successor to take office when the resignation becomes effective for the balance of the unexpired term of the resigning Director. However, the Board has the power to fill or leave unfilled, until the next election, all vacancies occurring on the Board, including those created by an authorized increase in the number of Directors. In the event that the Board decides not to fill a vacancy for a Director whose office is subject to election by the voting membership, the President may call a special meeting of the voting Members to elect such Director. In the event that less than a quorum of the Board remains to fill vacancies, then in that event, a vote of one hundred percent (100%) of the remaining Directors shall be required to fill any vacancy.

4.10. Presumption of Assent. A Director of ISoP who is present at a meeting of the Board at which action on any corporate matter is taken shall be presumed to have assented to the action taken unless his or her dissent shall be entered in the minutes of the meeting or unless he or she shall file his or her written dissent to such action with the person acting as the Secretary of the meeting before the adjournment thereof, or shall forward such dissent by registered mail to the Secretary of ISoP immediately after the adjournment of the meeting. Such right to dissent shall not apply to a Director who voted in favor of such action.

ARTICLE FIVE
OFFICERS

5.1. Responsibility: All Officers are subordinate and responsible to the Board.

5.2. Number and Election. The Board shall elect the President-Elect, every one (1) year from the President's recommendations after consultation with the Executive Committee. The Board shall elect the Secretary and Treasurer every two (2) years from the President's recommendations after consultation with the Executive Committee. The Board may also elect a Past President in accordance with the Section 5.8. The newly elected officers shall take office at the Annual Meeting of the Member immediately following such election at the meeting of the Board. Officers are elected from the ranks of the Directors. Officers retain Director status during their terms of office. Upon completion of their term as an Officer, they shall continue as members of the Board of Directors for the remainder of their unexpired term as a Director. The offices of Secretary and Treasurer may be held by the same person. One person may hold two (2) or more offices, but no officer shall execute, acknowledge, or verify any instrument in more than one capacity if the instrument is required by law to be executed, acknowledged, or verified by two (2) or more officers. All Officers are also considered Directors of ISoP. Each Officer shall hold office until a successor is elected and qualified, or until the Officer's resignation, death or removal. Each officer shall serve at the pleasure of the Board and shall be subject to removal at any time, with or without cause. Vacancies in offices shall be filled by election by the Board of Directors at any time to serve unexpired terms. Election to fill a vacancy for an unexpired term shall not be taken into account in determining the limitations on consecutive terms set forth in this Article.

5.3. Executive Director. The Board shall be empowered to contract the services of an Executive Director who shall be responsible for overseeing the administrative functions of ISoP, including the receipt and disbursement of funds under the direction of the Board. The Executive Director reports directly to the President.

5.4. President. The President shall be the chief executive and operating officer of ISoP, and subject to the direction and under the supervision of the Board, shall have general charge of the business affairs and property of the ISoP. The President shall preside at all regular and special meetings of ISoP, of the Board, and of the Executive Committee. The President shall be an ex officio member of all Standing Committees. The President shall have such other duties and responsibilities and may exercise such other powers as are usually incident to the office or as from time to time may be assigned by these Bylaws or the Board. The President will also serve as the Executive Director if the Board has not appointed one. The term of the President will be one (1) year, following a one (1) year term serving as President-Elect.

5.5. President-Elect and Vice President. The purpose of the President-Elect role is to prepare to assume the role of President of ISoP after serving as President-Elect. The term of the President-Elect will be one (1) year and will be followed by a one (1) year term serving as President. The President-Elect also serves in the role of Vice-President. At the request of the President, or in the President's absence or disability, the President-Elect shall perform all the duties of the President. When so acting, the President-Elect shall have all of the powers of, and be subject to all the restrictions upon the President. The President-Elect shall have such other duties and responsibilities and may exercise such other powers as from time to time may be assigned by the President or the Board or as may be provided in these Bylaws.

5.6. Secretary. The Secretary shall cause to be kept at the principal office of ISoP, the Secretary's principal place of business, or such other place as the Board may order, the official seal of ISoP (if any), the membership book and a book of minutes of all meetings of Directors and Members. The Secretary shall keep a membership book containing records for each current and previous Member: contact information, Member type (Member, Trainee Member, Fellow), institution, the date at which the membership was established, and, for previous ISoP members, the date upon which the membership ceased. The Secretary shall give the notices of the meetings of the Members as provided in these Bylaws. The Secretary shall also maintain and protect a file of all official and legal documents of the Corporation. The Secretary shall perform such other and further duties as may be required by law or as may be prescribed or required from time to time by the Board or the Bylaws. The term of office of Secretary is two (2) years. The Secretary may serve for no more than two successive terms.

5.7. Treasurer. The Treasurer shall have custody of all ISoP funds; keep full and accurate accounts of all receipts and disbursements of ISoP, an inventory of assets, and a record of the liabilities of ISoP; deposit all money and other securities in such depositories as may be designated by the Board; disburse the funds of ISoP as ordered by the President or the Board taking proper vouchers for disbursements; and prepare all statements and reports required by law, by the President or by the Board. The Treasurer shall have such other duties and responsibilities and may exercise such other powers as are usually incident to the office or as from time to time may be assigned by these Bylaws, the Board, or the President. The Treasurer shall make a financial report at each meeting of the Board and shall cause a proper audit of all ISoP financial activities at the end of each fiscal year. The Board or the President may delegate part of the authority and duties of the Treasurer to

subordinate Officers. The term of office of Treasurer is two (2) years. The Treasurer may serve for no more than two successive terms.

5.8. Past President. At the option of the person ending his or her term serving as President, that person may inform the Board that as the outgoing President, he or she desires to continue as an Officer and Director of the Corporation. If the outgoing President so informs the Board, the Board shall elect that person to serve as Past President. The purpose of the Past President is to assist the incoming President with the transition of ISoP leadership and to maintain continuity in ISoP leadership. The Past President shall have such other duties and responsibilities and may exercise such other powers as from time to time may be assigned by the President or the Board or as may be provided in these Bylaws. The term of the Past President is one (1) year immediately following such person's one (1) year term serving as President. If the outgoing President does not opt to continue to serve as an Officer of the Corporation, then the office of Past President shall remain vacant until the next outgoing President opts to serve as Past President.

5.9. Elections. Officers are elected from the ranks of the Directors. Officers retain Director status during their terms of office. Upon completion of their term as Officer, they shall continue as members of the Board for the remainder of their unexpired term as Director. The President may solicit names of candidates of Directors.

5.10. Transition. To maintain continuity in ISoP leadership, Officers whose terms of office have expired shall assure the orderly transition of authority to their successors before being relieved of their responsibilities. Similarly, Officers whose terms of office have expired shall take all appropriate steps to substitute their successors on all of ISoP's financial accounts and signature cards.

5.11. Vacancies. In the event of the death, resignation or incapacity of the President- Elect, Secretary or Treasurer, the President shall appoint a member of the Board to fill such unexpired term of office, if less than a year is left in the unexpired term of offices, otherwise, election of successors shall be made by the Board.”

ARTICLE SIX
PROHIBITED ACTIVITIES

6.1. Actions Jeopardizing Tax Status. This Corporation shall not carry on any activities not permitted to be carried on by an organization exempt from federal income taxes under Section 501(c)(6) of the Internal Revenue Code of 1986, as amended, or the corresponding provision of any future United States internal revenue law.

6.2. Lobbying and Political Activities. The Corporation may devote a substantial part of its activities for lobbying purposes (including the publishing or distribution of statements) or otherwise attempting to influence legislation. However, the Corporation may participate or intervene in (including the publishing or distribution of statements) any political or judicial campaign on behalf of any candidate for public office only to an insubstantial degree.

6.3. Private Inurement. No part of the net income or net assets of the Corporation shall inure to the benefit of, or be distributable to, its Directors, Officers, Members or other private persons. However, the Corporation is authorized to pay reasonable compensation for services rendered and to make payments and distributions in furtherance of its tax exempt purposes.

6.4. Non-Discrimination. In the conduct of all aspects of its activities, the Corporation shall not discriminate on the grounds of race, color, national origin, genotype or gender.

6.5. Conflicts of Interest. A conflict of interest occurs when a person under a duty to promote the interests of the Corporation (a "fiduciary") is in a position to promote a competing interest instead. Fiduciaries include all Corporation employees, Directors or Officers, and members of any Corporation committee. Undisclosed or unresolved conflicts of interest are a breach of the duty to act in the best interests of the Corporation and work to the detriment of the Corporation.

6.6. Typical Conflict Situations. Conflicts of interest are likely to arise whenever: a) A fiduciary has a personal interest in a vendor of goods or services to the Corporation; or b) Corporation employees are loaned to other organizations, or the employees of another organization are loaned to this Corporation.

6.7. Discharging Conflicts of Interest. All conflicts of interest must be disclosed to the Board of Directors. After disclosure is made, the individual with a conflicting interest must not participate in judging the merits of that interest. That is, such individual must abstain from voting on, or recommending a course of action with respect to, the situation giving rise to the conflict. When these are done, the conflict of interest has been properly discharged.

6.8. Preventing Conflict Situations. The Corporation, through the Board, shall encourage all fiduciaries to prevent conflicts of interest where possible.

- a) Fiduciaries should refuse to enter into self-dealing relationships with the Corporation as a vendor.
- b) Fiduciaries should not accept anything but gifts of insubstantial value from vendors.

- c) The lending of employees to, or acceptance of loaned employees from, other organizations should be avoided. If done, however, a clearly drafted contract defining wages, responsibilities, indemnification and conditions of employment is required.

6.9. Litigation. The Corporation shall not be a voluntary party in any litigation without the prior written approval of the Board.

ARTICLE SEVEN

OTHER FINANCIAL MATTERS

7.1. Property of the Corporation. The title to all property of the Corporation, both real and personal, shall be vested in the Corporation. The funds of the Corporation shall be derived from dues collected from the membership as fixed by the Board, as well as from endowments, gifts, grants, and bequests to ISoP, and from income from the various meetings, publications and such sources as may be agreed upon by the Board in accordance with the laws governing the Corporation.

7.2. Disposition Upon Dissolution. Upon the dissolution or winding up of the Corporation, or in the event it shall cease to engage in carrying out the purposes and goals set forth in these By-laws, all of the business, properties, assets and income of the Corporation remaining after payment, or provision for payment, of all debts and liabilities of this Corporation, shall be distributed as provided in the Corporation's certificate of incorporation, as the same may be amended from time to time.

7.3. Contracts. The Board may authorize any officer or agent to enter into any contract or execute and deliver any instrument in the name of and on behalf of the Corporation. Such authority may be general or confined to a specific instance. Unless so authorized by the Board, no officer, agent, or employee shall have any power or authority to bind the Corporation by any contract or engagement, or to pledge its credit, or render it pecuniarily liable for any purpose or to any amount. When the execution of any contract or other instrument has been authorized by the Board without specification of the executing officer, the President, either alone or with the Secretary or any Assistant Secretary, may execute the same in the name of, and on behalf of, the Corporation, and any such officer may affix the corporate seal (if any) of the Corporation thereto.

7.4. Voting Stock Owned by the Corporation. The Board may by resolution provide for the designation of the person who shall have full power and authority on behalf of the Corporation to vote either in person or by proxy at any meeting of the security holders of any corporation or other entity in which this Corporation may hold voting stock or other securities, and may further provide that at any such meeting such person may possess and exercise all of the rights and powers incident to the ownership of such voting securities which, as the owner thereof, this Corporation might have possessed and exercised if present. The Board may revoke any such powers as granted at its pleasure.

7.5. Financial Accounts. The Corporation may establish one or more checking accounts, savings accounts or investment accounts with appropriate financial entities or institutions as determined in the discretion of the Board to hold, manage or disburse any funds for Corporation purposes. 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(s) or agent(s) of the Corporation, and in such manner, as is determined by the Board from time to time.

7.6. Appointment and Employment of Advisors. The Board may from time to time appoint, as advisors, persons whose advice, assistance and support may be deemed helpful in determining policies and formulating programs for carrying out the Corporation's purposes. The Board is authorized to employ such persons, including an executive officer, attorneys, accountants, agents and assistants as in its opinion are needed for the administration of the Corporation and to pay reasonable compensation for services and expenses thereof.

7.7. Financial Statements and Reports. An independent auditor appointed or approved by the Board shall at such time as the Board determines prepare for the Corporation as a whole a consolidated financial statement, including a statement of combined capital assets and liabilities, a statement of revenues, expenses and distributions, a list of projects and/or organizations to or for which funds were used or distributed, and such other additional reports or information as may be ordered from time to time by the Board. The auditor shall also prepare such financial data as may be necessary for returns or reports required by state or federal government to be filed by the Corporation. The auditor's charges and expenses shall be proper expenses of administration.

7.8. Limitations on Debt. No debt shall be incurred by the Corporation beyond the accounts payable incurred by it as a result of its ordinary operating expenses, and no evidence of indebtedness shall be issued in the name of the Corporation unless authorized by the Board. Specifically, without limitation, no loan shall be made to any officer or director of the Corporation. Any director or officer who assents to or participates in the making of any such loan shall be liable, in addition to the borrower, for the full amount of the loan until it is fully repaid.

7.9. Liability of Directors and Officers. No Director or Officer of the Corporation shall be personally liable to its creditors or for any indebtedness or liability and any and all creditors shall look only to the Corporation's assets for payment. Further, neither any Officer, the Board nor any of its individual members shall be liable for acts, neglects or defaults of an employee, agent or representative selected with reasonable care, nor for anything the same may do or refrain from doing in good faith, including the following of done in good faith: errors in judgment, acts done or committed on advice of counsel, or any mistakes of fact or law.

7.10. Liability of Members. No Member of the Corporation shall be personally liable to its creditors or for any indebtedness or liability and any and all creditors shall look only to the Corporation's assets for payment.

7.11. Property Interests Upon Termination of Membership. Members have no interest in the property, assets or privileges of the Corporation. Cessation of membership shall operate as a release and assignment to the Corporation of all right, title and interest of any Member, but shall not affect any indebtedness of the Corporation to such Member.

7.12. Fiscal Year. The fiscal year of the Corporation shall be from each January 1 to each December 31.

ARTICLE EIGHT

COMMITTEES

8.1. Committee Powers. Committees of the Corporation shall be standing or special. The Board or the President may refer to the proper Committee any matter affecting ISO or any operations needing study, recommendation, or action. The Board may establish such special Committees or standing Committees in addition to those specified in this Article as it deems appropriate with such duties and responsibilities as it shall designate, except that no Committee

has the power to do any of the things a committee is prohibited from doing under the Act. All Committees shall act by majority vote, unless otherwise prescribed by the Board.

8.2. Limitations. Any action, recommendation, consideration, or decision of any Committee is subject to review by the Board. It shall receive, study, and react to all Committee reports submitted and shall advise the Committee chairperson of their reaction and recommendations. Except in cases where these Bylaws or the Board has by written resolution provided otherwise, the function of any Committee is as an advisory group to the Board. No member of any Committee, without the prior written consent of the Board, has the authority to purchase, collect funds, open bank accounts, implement policy, or bind or obligate ISoP or its Board in any way or by any means. All such powers are expressly reserved to the Board and the Officers of the Corporation. The Board shall have the power to:

- a) abolish any committee at its pleasure; and
- b) remove any person from membership on any committee at any time, with or without cause.

Specifically, no committee of the Board shall have authority to do any of the following:

- a) make, alter or repeal any by-law of the Corporation;
- b) elect or remove any Director, or remove any officer who may be elected or appointed only by the Board;
- c) amend or repeal any resolution theretofore adopted by the Board which, by its terms, is amendable or repealable only by the Board;
- d) fix the compensation of any officer who is a member of the committee for serving as an officer of the Corporation.

8.3. Committee Membership. The Board shall appoint and may remove each of the Committee Chairs. Committee Chairs may select members of such Committees from the ISoP membership, in consultation with the Board. All standing Committees shall consist of the Chairperson and at least two (2) other Members of ISoP, at least one of whom should be an ISoP Director. The President shall be an ex-officio member of every Committee other than the Executive Committee. Committee members shall be appointed for a term as determined by the

Board. No member of any committee may serve more than three (3) consecutive terms on the same Committee.

8.4. Standing Committees. In addition to other committees the Board may establish from time to time, the following will be standing committees of ISoP:

- a) The Executive Committee of the Board of Directors shall consist of the President, President-Elect, Past President (if any), Secretary, Treasurer, and Executive Director (ex officio and nonvoting). The Executive Committee shall, in intervals between meetings of the Board, have general control of the affairs of the Corporation, but nothing herein shall be construed to allow the Executive Committee to act to the exclusion of, or contrary to, the expressed direction of the Board. It shall keep a record of its actions and report to the Board.

An Executive Director may be appointed by the majority vote of the Board. The Executive Director shall provide for the recording and distribution of all actions of the Board and the Executive Committee and shall provide for and direct all administrative activities of the executive offices of ISoP, maintaining all records of membership, ISoP property and inventories, financial and accounting matters and such other records, functions and activities as shall be necessary to advance the interests and programs of ISoP.

Executive Committee meetings may be called at any time by the President, Executive Director or by three (3) members of the Executive Committee by written request to the President.

- b) The Membership and Communications Committee shall review the Membership and Trainee membership applications and react to the qualification of each candidate for admission to ISoP. It may recommend to the Board any changes to procedural rules or regulations and review membership relations within ISoP including, but not limited to, communications, benefits, controversies, complaints, resignations, and non-payment of dues.
- c) The Awards Committee shall review the ISoP Fellowship applications, and react to the qualification of each Fellowship candidate. The Awards Committee is

responsible for seeking and reviewing nominations for ISoP Awards and making final recommendations to the Board for approval of award recipients.

- d) The Finance Committee shall be responsible for the preparation and recommendation to the Board of an annual operating budget for the fiscal year of ISoP (January 1- December 31). It shall monitor the income and expenditures of ISoP together with the Treasurer, who is a member of the Finance Committee, to assure compliance with the operating budget. It shall also provide advice and guidance in the investment of available funds of ISoP, designed to maximize net income and to provide for appropriate cash flow to assure discharge of ISoP's financial obligations.
- e) The Nominations Committee shall solicit nominations from the membership for potential candidates for vacant seats on the Board of Directors. It shall review the list of the potential nominees and prepare a final list of candidates, which will be presented to the current Board for review and approval.
- o) The Publications Committee shall recommend policy for all publications of ISoP including but not limited to ISoP journals, newsletters, proceedings of symposia, seminars, and conferences that may be presented under ISoP auspices.
- g) The Standards and Best Practices Committee shall provide best practices and recommendations for standard pharmacometric analyses (e.g. population PK/PD, exposure-response, disease models) with the goal to increase consistency, productivity, quality, communication, and impact of pharmacometrics on decision making.
- h) The Education Committee shall have as its primary responsibility and function to coordinate and oversee educational programs (other than conferences) to meet recognized professional needs of the ISoP membership, and programs to advance and promote the science of pharmacometrics in general. The Education Committee chairperson is responsible for the selection of the Sub-Committee chairs. The Education Committee will have responsibility for the creation of education related Sub-Committees and the selection of the Sub-Committee chairs, including, but not limited to, the following:

- i. The Trainee Sub-Committee is responsible for recommending educational and career-related activities of interest to Trainee Members of ISoP.
 - H. The Pharmacometrics Center Sub-Committee is responsible for coordinating educational activities and resources provided via the ISoP web, other than those related to conferences.
- i) The Conference Committee shall submit a detailed outline of planned conferences to the Board annually, for approval and inclusion in the budget. Once the plan is approved by the Board, the Conference Committee will have responsibility for execution of the plan and approval of Sub-Committee activities. For conferences that are sponsored by ISoP, the Conference Committee chairperson is responsible for the creation of conference related Sub-Committees and the selection of the Sub-Committee chairs, including, but not limited to, the following:
 - i. The Programming Sub-Committee is responsible for the solicitation, review, development, and recommendation of programming content for any ISoP sponsored conferences, and annually reviewing the Programming guidelines.
 - H. The Abstract Review Sub-Committee is responsible for the review of contributed abstracts for any ISoP sponsored conferences, and annually reviewing the Abstract Review guidelines.
 - Hi. The Social Sub-Committee is responsible for the recommendation of social and professional networking activities for ISoP sponsored conferences.
 - iv. The Workshop Sub-Committee is responsible for the solicitation, review and recommendation of workshops at any ISoP sponsored conferences and any ISoP sponsored webinars.
- j) The International Advisory Committee shall identify and recommend to the Board opportunities on a global level to achieve the aims of ISoP, to partner with other

scientific and medical disciplines and organizations and to interface with other scientific committees, societies and conferences.

8.5. Special Committees. The Board may establish such special committees or task forces as it deems appropriate from time to time. Special committees or task forces shall have the duties and responsibilities as the Board shall designate from time to time.

ARTICLE NINE

INDEMNIFICATION

9.1. Right to Indemnification. Each person who was or is a party to or is threatened to be made a party to or is involved in any action, suit, or proceeding, whether civil, criminal, administrative, or investigative, formal or informal (hereinafter referred to as a "proceeding"), by reason of the fact that he or she, or a person of whom he or she is the legal representative, is or was a director or officer of the Corporation or, while serving as a director or officer of the Corporation, is or was serving at the request of the Corporation as a director, officer, partner, Director, employee, or agent of another foreign or domestic corporation, partnership, joint venture, trust, or other enterprise, whether for profit or not, including service with respect to employee benefit plans, whether the basis of the proceeding is alleged action in an official capacity as a director, officer, employee, or agent or in any other capacity while serving as a director or officer, shall be indemnified and held harmless by the Corporation to the fullest extent authorized by state law, as it exists or may be amended (but, in the case of any such amendment, only to the extent that the amendment permits the corporation to provide broader indemnification rights than state law permitted the Corporation to provide before the amendment), against all expenses, liability, and loss (including attorney fees, judgments, fines, ERISA excise taxes, or penalties and amounts to be paid in settlement) reasonably incurred by the person in connection therewith, and the indemnification shall continue for a person who has ceased to be a director or officer and shall inure to the benefit of his or her heirs, executors, and administrators; provided, however, that except as provided in the next section with respect to proceedings seeking to enforce rights to indemnification, the Corporation shall indemnify any such person seeking indemnification in connection with a proceeding, or part thereof, initiated by the person only if the proceeding, or part thereof, was authorized by the Board of Directors of the Corporation. To the extent authorized by state law, the Corporation may, but shall not be

required to, pay expenses incurred in defending a proceeding in advance of its final disposition. The right to indemnification conferred in this article shall be a contract right.

9.2. Non Exclusivity of Rights. The right to indemnification conferred in this article shall not be exclusive of any other right that any person may have or acquire under any statute, provision of the articles of incorporation, bylaw, agreement, vote of stockholders or disinterested directors, or otherwise.

9.3. Indemnification of Employees and Agents of the Corporation. The corporation may, to the extent authorized from time to time by the Board, grant rights to indemnification and to payment by the Corporation, for expenses incurred in defending any proceeding before its final disposition, to any employee or agent of the Corporation to the fullest extent of the provisions of this article with respect to the indemnification and advancement of expenses of Directors and Officers of the Corporation.

9.4. 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 is or was serving at the request of the Corporation as a director, officer, partner, Director, employee, or agent of another corporation, partnership, joint venture, trust, or other enterprise, against any liability asserted against the person and incurred by him or her in any such capacity or arising out of his or her status as such, whether or not the Corporation would have power to indemnify the person against the liability under these bylaws or the laws of the state of New Jersey.

9.5. Changes in New Jersey Law. If there is any change of the New Jersey statutory provisions applicable to the Corporation relating to the subject matter of this Article, then the indemnification to which any person shall be entitled under this Article shall be determined by the changed provisions, but only to the extent that the change permits the Corporation to provide broader indemnification rights than the provisions permitted the Corporation to provide before the change. Subject to the next Section, the Board is authorized to amend these bylaws to conform to any such changed statutory provisions.

9.6. Amendment or Repeal of Article. No amendment or repeal of this Article shall apply to or have any effect on any director, officer, employee, or agent of the Corporation for or with respect to any acts or omissions of the director, officer, employee, or agent occurring before the amendment or repeal.

9.7. Impact of Tax Exempt Status. The rights to indemnification set forth in this Article are expressly conditioned upon such rights not violating the Corporation's status as a tax exempt organization described in Section 501(c)(6) of the Internal Revenue Code of 1986, as amended.

ARTICLE TEN
AMENDMENTS TO BYLAWS

10.1. Amendments. These By-laws may be amended, restated or repealed by a vote of not less than a two-thirds (2/3) majority of the members of the Board present at a duly called meeting at which a quorum is present, provided that notice of the proposed alteration, amendment or repeal of the By-laws has been sent to the entire Board at least ten (10) days prior to the meeting at which such alteration, amendment or repeal of the by-laws is to be considered. No vote of the Members shall be required or allowed, except as provided in the Corporation's Constitution.

10.2. Force and Effect of By-Laws. These By-laws are subject to the provisions of the New Jersey Nonprofit Corporation Act, as amended from time to time, and the Corporation's certificate of incorporation, as restated or amended from time to time. If any provision in these By-laws is inconsistent with a provision in that Act or the certificate of incorporation, the provision of that Act or the certificate of incorporation shall govern to the extent of the inconsistency.

10.3. Inspection of By-laws. These By-laws, as may be amended or restated from time to time, shall at all times be kept in the principal office of the Corporation for the transaction of business, and shall be open to inspection by the Members, Officers and Directors at all reasonable times during office hours.