SCHEDULE A

Aptose Biosciences Inc.

Director Majority Voting Policy

The board of directors (the "**Board**") of Aptose Biosciences Inc. (the "**Corporation**") believes that each director should have the confidence and support of the shareholders of the Corporation (each a "**Shareholder**").

Recent amendments to the TSX Company Manual have been introduced to enhance director election practices in Canada.

Accordingly, the Board has unanimously adopted this policy providing for majority voting in director elections at any meeting of Shareholders where an "uncontested election" of directors is held.

For the purposes of this policy, an "uncontested election" of directors of the Corporation means an election where the number of nominees for directors is equal to the number of directors to be elected.

All future nominees for election to the Board will be required to confirm that they will abide by this policy.

Forms of proxy for the election of directors of the Corporation will permit a Shareholder to vote in favour of, or to withhold from voting, separately for each director nominee. The chair of the Board will ensure that the number of shares voting in favour or withheld from voting for each director nominee is recorded and promptly made public after the meeting. If the vote was conducted by a show of hands, the Corporation will disclose during the meeting the number of shares voted by proxy in favour or withheld for each director.

If a director nominee has more votes withheld than are voted in favour of him or her, the nominee will be considered by the Board not to have received the support of the Shareholders, even though duly elected as a matter of corporate law. Such a nominee must forthwith submit his or her resignation to the Board, effective on acceptance by the Board. The Board will refer the resignation to the Corporate Governance and Nominating Committee of the Board (the "Committee") for consideration.

The Committee will consider whether or not to accept the offer of resignation and will recommend to the Board whether or not to accept it. In considering whether or not to accept the resignation of that director and make its recommendation to the Board, the Committee will consider all factors deemed relevant by members of the Committee including, without limitation, any stated reasons why Shareholders, or a group of them, withheld votes from the election of that director, the composition of the Board, and the Corporation's governance guidelines and practices.

Within 90 days following the applicable meeting of the Shareholders, the Board will determine whether to accept or reject the director resignation offer that has been

submitted, on the recommendation of the Committee. In considering the Committee's recommendation, the Board will consider the factors considered by the Committee and such additional information and factors that the Board considers to be relevant. With the exception of special circumstances that would warrant the continued service of the applicable director on the Board, the Board is expected to accept the resignation of said director. Following the Board's decision on the resignation, the Board will promptly disclose, via press release, its decision whether to accept the director's resignation offer, including, without limitation, the reasons for rejecting the resignation offer, if applicable, and send a copy of the press release to the Toronto Stock Exchange. If a resignation is accepted, the Board may, subject to any applicable corporate law restrictions, (1) leave a vacancy on the Board unfilled until the next annual general meeting of Shareholders, (2) fill the vacancy by appointing a new director whom the Board considers to merit the confidence of the Shareholders, or (3) call a special meeting of Shareholders to consider new Board nominee(s) to fill the vacant position(s).

A director who tenders his or her resignation pursuant to this policy will not be permitted to participate in any meeting of the Board and/or the Committee, if he or she is a member of the Board and/or the Committee, as applicable, at which his or her resignation is to be considered. However, if each member of the Committee, or a sufficient number of Committee members received a greater number of votes withheld than the votes in favour of each member in the same election, such that the Committee no longer has a quorum, then the remaining members of the Committee, if any, will not consider the resignation offer(s) and the Board will consider whether or not to accept the offer of resignation without a recommendation from the Committee.

If a sufficient number of the Board members received a greater number of votes withheld than the votes in favour of such members in the same election, such that the Board no longer has a quorum, then such directors receiving a majority of votes withheld will not be permitted to vote in any meeting of the Board at which his or her resignation offer is considered, however he or she will be counted for the purpose of determining whether the Board has quorum.

If any director, who received a greater number of votes withheld than votes in favour of such director's election does not tender his or her resignation in accordance with this policy, he or she will not be re-nominated by the Board for election as a director of the Corporation at the next annual general meeting of shareholders.

The Committee may adopt such procedures as it sees fit to assist it in its determinations with respect to this policy.

This policy will be summarized or included in each management proxy circular relating to the election of the directors of the Corporation.

Amended as of May 11, 2017