

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

**SCHEDULE 14A**

Proxy Statement Pursuant to Section 14(a) of  
the Securities Exchange Act of 1934

Filed by the Registrant ☒

Filed by a Party other than the Registrant ☐

Check the appropriate box:

- ☐ Preliminary Proxy Statement
- ☐ Confidential, for Use of the Commission Only (as permitted by Rule 14a 6(e)(2))
- ☒ Definitive Proxy Statement
- ☐ Definitive Additional Materials
- ☐ Soliciting Material Pursuant to §240.14a 12

**Aptose Biosciences Inc.**

(Name of Registrant as Specified in its Charter)

**Not Applicable**

(Name of Person(s) Filing Proxy Statement if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- ☒ No fee required.
- ☐ Fee computed on table below per Exchange Act Rules 14a 6(i)(1) and 0-11.
- |       |   |
|-------|---|
| (1)   | Title of each class of securities to which transaction applies:   |
| <hr/> |   |
| (2)   | Aggregate number of securities to which transaction applies:  |
| <hr/> |   |
| (3)   | Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0 11 (Set forth the amount on which the filing fee is calculated and state how it was determined): |
| <hr/> |   |
| (4)   | Proposed maximum aggregate value of transaction:  |
| <hr/> |   |
| (5)   | Total fee paid:   |
| <hr/> |   |

☐ Fee paid previously with preliminary materials.

☐ Check box if any part of the fee is offset as provided by Exchange Act Rule 240.0 11 and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

- |       |   |
|-------|---|
| (1)   | Amount Previously Paid:                       |
| <hr/> |   |
| (2)   | Form, Schedule or Registration Statement No.: |
| <hr/> |   |
| (3)   | Filing Party:                                 |
| <hr/> |   |
| (4)   | Date Filed:                                   |
| <hr/> |   |

---



**NOTICE AND PROXY STATEMENT**  
**FOR THE**  
**ANNUAL GENERAL MEETING OF SHAREHOLDERS**  
**TO BE HELD ON JUNE 2, 2020**

April 24, 2020

---

Dear Aptose Shareholders,

This letter comes to you during unprecedented times. Before I bring you up to date on Aptose business, I'd like to express our heartfelt thanks to all healthcare workers and other essential staff who are supporting patients and the rest of us during this challenging time.

Times like this also remind us of the importance of what our industry is trying to accomplish. For Aptose, it is the development of our distinctive clinical assets, CG-806 and APTO-253, to address great unmet needs in hematologic cancers. I am privileged to serve as the leader of this company both as we constructed the foundation for these product candidates and as we moved these highly differentiated targeted agents into the clinic.

We are emerging from 2019 as a critical and productive year wherein both of our product candidates progressed in their respective clinical trials and are starting to yield meaningful, albeit early, clinical activity. And now in 2020 we are advancing both programs, but within an ever-changing landscape caused by the COVID-19 pandemic.

Because treatment of critically ill patients with hematologic cancers is not elective, our Phase 1 clinical trials for CG-806 and APTO-253 have continued to enroll and treat patients, despite recent events. We are continually adapting to COVID-19 driven disruptions at clinical sites and have introduced safeguards such as virtual monitoring for the safety of our patients, physicians and our team as a top priority. So, with a number of adaptive and precautionary measures, we have continued to execute on our clinical plan during 2020.

The unquestionable highlight of 2019 for us was the initiation of our CG-806 phase 1 clinical trial in B-cell cancers, including relapsed or refractory chronic lymphocytic leukemia (CLL) and non-Hodgkin's lymphomas (NHL).

CG-806 is like no other drug commercialized or under development. It is much more than the "typical" FLT3 or BTK inhibitor, as it not only inhibits wild type and mutant forms of BTK and FLT3, it potently and simultaneously suppresses multiple oncogenic signaling pathways upon which cancer cells rely for survival and drug resistance. This singular compound targets the primary drivers of B-cell malignancies and acute myeloid leukemia (AML), including BTK and FLT3, yet with a precision that avoids known targets that are often associated with toxicities. It is the unparalleled kinase selectivity profile that sets CG-806 apart from other hematology drugs on the market or in development and what is contributing to much of the excitement surrounding the compound.

We are tremendously grateful for the patients, families and investigators who are participating in both of our clinical trials and supporting our efforts to create better therapeutics.

During 2019, we also saw progress on other fronts. We considerably expanded our management team with the appointments of Joti Marango M.D. Ph.D., who joined us mid-year as Senior Vice President and Chief Business Officer; Rafael Bejar M.D. Ph.D., to the position of Senior Vice President and Chief Medical Officer; and Mr. Victor Montalvo-Lugo as our Vice President of Clinical Operations. We have been very fortunate to attract the interest of such high-caliber individuals in our field to join our executive team.

We also attracted new industry, analyst and investor interest, and appreciated the opportunity to present at multiple scientific, clinical and banking conferences around the world.

---

As a result of the progress we made throughout 2019, we appreciably strengthened our financial position and closed two separate offerings during the year, raising a total of \$95 million. Our current cash position and access to available sources provide us comfortable runway into 2022.

I am exceptionally proud of the Aptose organization – the employees and consultants, the Board of Directors, the top-notch clinical investigators and importantly, the patients – who have participated in advancing our vital work. After a year of solid performance, we have two well-tolerated hematology compounds - CG-806 and APTO-253 - advancing in the clinic. I thank you, our shareholders, for your trust and support and look forward to keeping you apprised of our progress.

Sincerely,  
William G. Rice, Ph.D.  
Chairman, President and Chief Executive Officer

---

**Aptose Biosciences Inc.**  
**Notice of 2020 Annual General Meeting of Shareholders**

**NOTICE IS HEREBY GIVEN** that the annual general meeting (the “Meeting”) of shareholders of Aptose Biosciences Inc. (the “Corporation”) will be held at on June 2, 2020 at 10:00 a.m. (Pacific time). The Meeting will be conducted as an online only annual general meeting. There will be no physical location for shareholders and duly appointed proxyholders to attend. Shareholders and duly appointed proxyholders may attend the virtual Meeting online at <https://web.lumiagm.com/192484056>, where they will be able to listen, vote, and submit questions during the Meeting’s live webcast.

**What the Meeting is About**

The following items of business will be covered at the Meeting:

1. receiving the financial statements of the Corporation for the fiscal year ended December 31, 2019, including the auditor’s report thereon;
2. electing seven directors to serve until the 2021 Annual Meeting of Shareholders;
3. appointing KPMG LLP as the independent registered public accounting firm of the Corporation for the fiscal year ending December 31, 2020; and
4. transacting such other business as may be properly brought before the Meeting.

The shareholders may also consider other business that properly comes before the Meeting or any adjournment of the Meeting. The proxy statement accompanying this notice of meeting provides additional information relating to the matters to be dealt with at the Meeting and forms part of this notice.

**You have the right to vote**

You are entitled to receive notice of and vote at the Meeting, or any adjournment, if you are a holder of common shares of the Corporation at the close of business on April 23, 2020.

You have the right to vote your shares on items 2 and 3 listed above and any other items that may properly come before the Meeting or any adjournment.

The Notice of Meeting, Proxy Statement and the form of proxy will be mailed to you on or around May 7, 2019. Detailed instructions regarding shareholders’ voting process are also available on our website at <https://www.aptose.com/investors/news-events/ir-calendar>.

**Your vote is important**

If you are not able to be present at the Meeting, please exercise your right to vote by signing and returning the enclosed form of proxy to Computershare Investor Services Inc., 100 University Avenue, 8<sup>th</sup> Floor, Toronto, Canada M5J 2Y1, so as to arrive not later than 5:00 p.m. (Toronto time) on May 29, 2020 or, if the Meeting is adjourned, 48 hours (excluding Saturdays, Sundays and holidays) before any adjournment of the Meeting.

BY ORDER OF THE BOARD OF DIRECTORS

William G. Rice, Ph.D.  
Chairman, President and Chief Executive Officer  
April 24, 2020

---

**IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE ANNUAL GENERAL MEETING OF SHAREHOLDERS TO  
BE HELD ON JUNE 2, 2020.**

Our Notice of 2020 Annual General Meeting of Shareholders, Proxy Statement and Annual Report to Shareholders are available on the Corporation's website at [www.aptose.com](http://www.aptose.com) in the Investors section.



## TABLE OF CONTENTS

<b>GENERAL INFORMATION ABOUT THE PROXY STATEMENT</b>	<b>1</b>
<b>QUESTIONS ABOUT THE ANNUAL AND SPECIAL MEETING AND VOTING YOUR SHARES</b>	<b>1</b>
<b>CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS</b>	<b>10</b>
<b>VOTING SECURITIES AND PRINCIPAL HOLDERS OF VOTING SECURITIES</b>	<b>11</b>
<b>SHARE OWNERSHIP OF CERTAIN BENEFICIAL OWNERS, MANAGEMENT AND DIRECTORS</b>	<b>11</b>
<b>SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE</b>	<b>12</b>
<b>RECEIPT OF FINANCIAL STATEMENTS</b>	<b>12</b>
<b>PROPOSAL NO. 1—ELECTION OF DIRECTORS</b>	<b>12</b>
Board Recommendation	17
<b>CORPORATE GOVERNANCE</b>	<b>17</b>
Board Mandate	17
Composition and Independence of the Board	18
Board Leadership	18
Nomination of Directors	19
Director Term Limits and Other Mechanisms of Board Renewal	21
Position Descriptions	22
Orientation and Continuing Education	22
Assessments	22
Meeting Attendance	23
Executive Sessions	23
Ethical Business Conduct	23
Conflicts of Interest	24
Shareholder Communications with the Board	24
Board Committees	24
<b>PROPOSAL NO. 2—APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM</b>	<b>27</b>
Board Recommendation	27
Audit, Audit-Related, Tax and Other Fees	27
Pre-Approval Policies and Procedures	28
Audit Committee Report	28
<b>EXECUTIVE COMPENSATION</b>	<b>29</b>
Executive Officers	29
Independent Advice	32
Comparator Group	32
Summary Compensation Table	35
Outstanding Equity Awards at Fiscal Year-End	37
Retirement Benefits	38
Termination and Change of Control Benefits	38

---

<b>DIRECTOR COMPENSATION</b>	<b>39</b>
Overview	39
Cash Compensation	39
Option Awards	39
<b>EQUITY COMPENSATION PLAN INFORMATION</b>	<b>40</b>
General	40
Share Option Plan	41
Stock Incentive Plan	42
Employee Share Purchase Plan	43
Equity Compensation Plan Information	43
Securities issuable under equity compensation plans as a percentage of outstanding Shares	44
Annual Burn Rate	44
<b>INTEREST OF CERTAIN PERSONS IN MATTERS TO BE ACTED UPON</b>	<b>45</b>
<b>INTEREST OF RELATED PERSONS IN TRANSACTIONS</b>	<b>45</b>
<b>HOUSEHOLDING OF ANNUAL PROXY MATERIALS</b>	<b>46</b>
<b>INDEBTEDNESS</b>	<b>46</b>
<b>DIRECTORS AND OFFICERS' LIABILITY</b>	<b>46</b>
<b>MANAGEMENT CONTRACTS</b>	<b>46</b>
<b>ADDITIONAL INFORMATION</b>	<b>46</b>
<b>DIRECTORS' APPROVAL</b>	<b>47</b>

---



## GENERAL INFORMATION ABOUT THE PROXY STATEMENT

The information contained in this proxy statement (the “Proxy Statement”) is furnished in connection with the solicitation of proxies to be used at the annual general meeting (the “Meeting”) of holders (the “Shareholders”) of common shares (the “Shares”) of Aptose Biosciences Inc. (the “Corporation”, “Aptose”, “we” or “our”) to be held on June 2, 2020 at 10:00 a.m. (Pacific time) and at all adjournments thereof, for the purposes set forth in the accompanying notice of meeting (the “Notice of Meeting”). The Meeting will be held online at <https://web.lumiagm.com/192484056>. There will be no physical location for shareholders and duly appointed proxyholders to attend. It is expected that the solicitation will be made primarily by mail but proxies may also be solicited personally by directors, officers, employees or agents of the Corporation. The solicitation of proxies by this Proxy Statement is being made by or on behalf of management of the Corporation. The total cost of the solicitation will be borne by Aptose.

The information contained in this Proxy Statement is given as at April 24, 2020 except where otherwise noted. All references to “dollar” or the use of the symbol “\$” are to United States dollars and use of the symbol “C\$” refers to Canadian dollars, unless otherwise indicated.

## QUESTIONS ABOUT THE ANNUAL AND SPECIAL MEETING AND VOTING YOUR SHARES

### *What are the date, time and place of the Meeting?*

The Meeting will be held on June 2, 2020 at 10:00 a.m. (Pacific time). The Meeting will be held online at <https://web.lumiagm.com/192484056>. There will be no physical location for shareholders and duly appointed proxyholders to attend. The meeting will be accessible 15 minutes prior to start time.

### *How can I access the Meeting virtually?*

To participate in the Meeting, visit <https://web.lumiagm.com/192484056>. Registered Shareholders and duly appointed and registered proxyholders will be able to listen, vote and ask questions via the virtual meeting platform. It is to be noted, however, that questions cannot be submitted prior to the Meeting. Non-registered Shareholders who have not appointed themselves as proxy holders will only be able to attend the Meeting as “Guests” and will not be able to vote or ask questions at the Meeting. To access the Meeting virtually, registered Shareholders and duly appointed proxyholders will need an Internet connection and an Internet connected device (such as a desktop, laptop, tablet or cell phone) running the most updated version of applicable software and plugins. The virtual meeting platform is fully supported across browsers (Microsoft Edge, Chrome, Firefox and Safari). Participants in the Meeting must be connected to Internet at all times during the Meeting in order to vote when balloting commences. A summary of the information Shareholders will need to attend the Meeting is provided below:

1. Registered Shareholders and duly appointed proxyholders can participate in the Meeting by clicking **“I have a login”** and entering a Username and Password before the start of the Meeting.
  - a. Registered Shareholders – The 15-digit control number located on the form of proxy or in the email notification you received is the Username and the Password is “aptose2020”.
  - b. Duly appointed proxyholders – Following the registration of the proxyholder with Computershare, Computershare will provide the proxyholder with a Username after the voting deadline has passed. The Password to the Meeting is “aptose2020”.

2. Voting at the Meeting will only be available for registered Shareholders and duly appointed and registered proxyholders. Non-registered Shareholders who have not appointed themselves may attend the Meeting by clicking “**I am a guest**” and completing the online form. This will allow them listen to the Meeting however they will not be able to vote or submit questions.
3. Registered Shareholders who use a 15-digit control number to login to the online Meeting and who accept the terms and conditions will be revoking any and all previously submitted proxies. However, in such a case, registered Shareholders will be provided the opportunity to vote by ballot on the matters put forth at the Meeting. If registered Shareholders wish to revoke all previously submitted proxies, they should not accept the terms and conditions, in which case they can only enter the Meeting as a guest.

If you attend the Meeting, it is important that you remain connected to the internet at all times during the Meeting in order to vote when balloting commences. It is your responsibility to ensure connectivity for the duration of the Meeting. You will be able to access the Meeting before the start time and should allow ample time for online check-in, which will begin at 9:45 a.m. (Pacific time) on June 2, 2020.

***Why is the Meeting held virtually?***

By conducting our Meeting online, the Board is aiming at limiting travel and social contact related to the Meeting and, as such, minimizing the contamination risks posed by large-in person gatherings in light of the current COVID-19 outbreak. The virtual format will also provide Shareholders an opportunity to participate in the Meeting without incurring significant travel costs or being restricted by time constraints.

The format of the Meeting has been designed to ensure that Shareholders who attend the Meeting online will be afforded the same rights and opportunities to participate as they have in previous annual general meetings. Directors will also attend the Meeting via the virtual platform.

***Can I submit questions prior or at the Meeting?***

Registered Shareholders and duly appointed and registered proxyholders can ask questions during the Meeting via the virtual meeting platform. It is to be noted, however, that questions cannot be submitted prior to the meeting. Questions pertinent to the Meeting matters will be answered at a designated time during the Meeting, subject to time constraints. The chair of the Meeting reserves the right to edit or reject questions it deems irrelevant to meeting matters, profane or inappropriate.

The chair of the Meeting has broad authority to conduct the Meeting in an orderly manner. To ensure the Meeting is conducted in a manner that is fair to all Shareholders, the chair of the Meeting may exercise its discretion in recognizing Shareholders who wish to participate, in determining the order in which questions are asked, and in determining the order in which questions are asked and the amount of time devoted to each question. However, consistent with prior annual shareholders’ meeting, questions submitted in accordance with the rules of conduct generally will be addressed in the order received during the allotted time for questions.

***Who can vote at the Meeting?***

Only Shareholders as of the close of business on the record date, being April 23, 2020, are entitled to receive notice of and vote on matters to be presented at the Meeting, or any adjournment or postponement thereof, in the manner and subject to the procedures described in this Proxy Statement and the accompanying proxy card.

At the close of business on the record date, 76,273,719 Shares were issued and outstanding.

Each Shareholder is entitled to one vote per Share held on all matters to come before the Meeting. Common shares of Aptose are the only securities of Aptose which will have voting rights at the Meeting.

***What is the quorum for the Meeting?***

The presence at the opening of the Meeting of two persons who are entitled to vote either as Shareholders or as proxy holders and holding or representing not less than 33⅓% of the outstanding Shares entitled to vote at the Meeting as of the record date will constitute a quorum for the transaction of business at the Meeting. In general, Shares represented by a properly signed and returned proxy card, or properly voted by Internet or telephone, or voted by your broker will be counted as shares present and entitled to vote at the Meeting for purposes of determining a quorum. Shares represented by proxies marked “Abstain” and “broker non-votes” are also counted in determining whether a quorum is present.

***What does it mean to vote by proxy?***

Voting by proxy means that you are giving the person or people named on your proxy form (the “proxyholder”) the authority to vote your Shares for you at the Meeting or any adjournment. A proxy form is included with this Proxy Statement.

The management representatives named on the proxy form will vote your Shares for you, unless you appoint someone else to be your proxyholder. You have the right to appoint a person to represent you at the Meeting other than the persons named on the proxy form. If you appoint someone else, he or she must be present at the Meeting to vote your Shares. If you want to appoint someone else, you can insert that person’s name in the blank space provided in the form of proxy. That other person does not need to be a Shareholder of the Corporation.

If you are voting your Shares by proxy, our transfer agent, Computershare Investor Services Inc. (“Computershare”), must receive your completed proxy form by 5:00 p.m. (Toronto time) on May 29, 2020 or, if the Meeting is adjourned, 48 hours (excluding Saturdays, Sundays and holidays) before any adjournment of the Meeting.

***What’s the difference between registered and non-registered (beneficial) Shareholders?***

The voting process is different depending on whether you are a registered or non-registered (beneficial) Shareholder:

**Registered Shareholders**

You are a registered Shareholder if your name appears on your Share certificate or in the registers of the Corporation maintained by Computershare. Your proxy form tells you whether you are a registered Shareholder. We mail copies of the Notice of Meeting, this Proxy Statement and the form of proxy (collectively, the “proxy materials”) directly to registered Shareholders. We have previously mailed our annual report to all registered Shareholders.

## Non-Registered (or Beneficial) Shareholders

You are a non-registered (or beneficial) Shareholder if your bank, trust company, securities broker or other financial institution holds your Shares for you (as your nominee). For most of you, your voting instruction form or proxy tells you whether you are a non-registered (or beneficial) Shareholder.

In accordance with Canadian securities law and SEC rules, we have distributed copies of the proxy materials and the annual report to CDS Clearing and Depository Services Inc. ("CDS") and intermediaries (such as securities brokers or financial institutions) for onward distribution to those non-registered or beneficial Shareholders to whom we have not sent the proxy materials and the annual report directly.

The intermediaries are required to forward proxy materials and the annual report to non-registered or beneficial Shareholders unless a non-registered or beneficial Shareholder has waived the right to receive them. Very often, intermediaries will use a service company such as Broadridge Investor Communication Solutions to forward the proxy materials to non-registered or beneficial Shareholders.

### ***How do I vote?***

Most non-registered or beneficial Shareholders who have not waived the right to receive proxy materials will receive a voting instruction form ("VIF"). Registered Shareholders will, and some non-registered (beneficial) Shareholders may receive a form of proxy. Shareholders should follow the additional procedures set out below, depending on what type of form they receive. Detailed instructions regarding shareholders' voting process are also available on the Investors page of our website at <https://www.aptose.com/investors/news-events/ir-calendar>.

1. **Voting Instruction Form.** If the non-registered Shareholder does not wish to attend and vote at the Meeting in person (or have another person attend and vote on the non-registered Shareholder's behalf), the voting instruction form must be completed, signed and returned in accordance with the directions on the form, so that the intermediary may vote on the non-registered Shareholder's behalf.

If a non-registered Shareholder wishes to attend and vote at the Meeting in person (or have another person attend and vote on the non-registered Shareholder's behalf), the non-registered Shareholder must complete, sign and return the VIF in accordance with the directions provided. If the non-registered Shareholder wishes to attend and vote at the Meeting in person, they must appoint themselves as proxyholder. Otherwise, the non-registered Shareholder will only be able to attend the Meeting as a "Guest", and will not be able to vote or ask questions at the Meeting. Non-registered Shareholders should visit our website at <https://www.aptose.com/investors/news-events/ir-calendar> to obtain additional instructions on how to vote online during the Meeting.

Non-registered Shareholders who wish to appoint themselves as a proxy holder in order to attend the Meeting in person or who wish to appoint a proxyholder other than a management representative to represent them at the online Meeting must submit their VIF prior to registering themselves or their proxyholder, as applicable. Registering themselves or the proxyholder, as applicable, is an additional step once a non-registered Shareholder has submitted their VIF. Failure to register themselves or another person other than a management representative as duly appointed proxyholder will result in the non-registered Shareholder or the proxyholder not receiving a Username to participate in the Meeting. To register a proxyholder (be it themselves or another person other than a management representative), non-registered Shareholders must visit <https://www.computershare.com/aptose> by 5:00 p.m. (Toronto time) on May 29, 2020 or, if the Meeting is adjourned, 48 hours (excluding Saturdays, Sundays and holidays) before any adjournment of the Meeting, and provide Computershare with their information or their proxyholder's contact information, as applicable, so that Computershare may provide them or the proxyholder, as applicable, with a Username via email. Without a Username, non-registered Shareholders who appointed themselves as proxyholders and proxyholders will only be able to attend the Meeting as "Guests" and will not be able to vote or ask questions at the Meeting.

Or

2. Form of Proxy. A registered Shareholder will receive a form of proxy to be completed, signed and returned in accordance with the directions on the form, if the registered Shareholder does not wish to attend and vote at the Meeting in person (or have another person attend and vote on the registered Shareholder's behalf).

Registered Shareholders who wish to appoint a proxyholder other than a management representative to represent them at the online Meeting must submit their form of proxy prior to registering their proxyholder. Registering the proxyholder is an additional step once a registered Shareholder has submitted their proxy. Failure to register a duly appointed proxyholder will result in the proxyholder not receiving a Username to participate in the Meeting. To register a proxyholder, registered Shareholders must visit <https://www.computershare.com/aptose> by 5:00 p.m. (Toronto time) on May 29, 2020 or, if the Meeting is adjourned, 48 hours (excluding Saturdays, Sundays and holidays) before any adjournment of the Meeting, and provide Computershare with their proxyholder's contact information, so that Computershare may provide the proxyholder with a Username via email. Without a Username, proxyholders will only be able to attend the Meeting as "Guests" and will not be able to vote or ask questions at the Meeting.

Registered Shareholders may also attend and vote at the Meeting in person. Registered Shareholders should visit our website at <https://www.aptose.com/investors/news-events/ir-calendar> to obtain additional instructions on how to vote online during the Meeting. The 15-digit control number provided on the registered Shareholder's voting instruction form will be required.

Less frequently, a non-registered Shareholder will receive, as part of the proxy materials, a form of proxy that has already been signed by the intermediary (typically by a facsimile or stamped signature), which is restricted as to the number of Shares beneficially owned by the non-registered Shareholder but which is otherwise uncompleted. If the non-registered Shareholder does not wish to attend and vote at the Meeting in person (or have another person attend and vote on the non-registered Shareholder's behalf), the non-registered Shareholder must complete the form of proxy and deposit it with Computershare, 100 University Avenue, 8<sup>th</sup> Floor, Toronto, Canada, M5J 2Y1 as described above.

If a non-registered Shareholder wishes to attend and vote at the Meeting in person (or have another person attend and vote on the non-registered Shareholder's behalf), the non-registered Shareholder must strike out the names of the persons named in the proxy and insert the non-registered Shareholder's (or such other person's) name in the blank space provided. The non-registered Shareholder must then register themselves or the other person, as applicable, as proxyholder. Registering themselves or the other person, as applicable, is an additional step once a non-registered Shareholder has submitted their completed proxy form. Failure to register themselves or the other person, as applicable, as duly appointed proxyholder will result in the non-registered Shareholder or the proxyholder, as applicable, not receiving a Username to participate in the Meeting. To register a proxyholder (be it themselves or another person), non-registered Shareholders must visit <https://www.computershare.com/aptose> by 5:00 p.m. (Toronto time) on May 29, 2020 or, if the Meeting is adjourned, 48 hours (excluding Saturdays, Sundays and holidays) before any adjournment of the Meeting, and provide Computershare with their information or their proxyholder's contact information, as applicable, so that Computershare may provide them or the proxyholder, as applicable, with a Username via email. Without a Username, non-registered Shareholders who appointed themselves as proxyholders and proxyholders will only be able to attend the Meeting as "Guests" and will not be able to vote or ask questions at the Meeting.

3. United States non-registered (beneficial) Shareholders. If a non-registered Shareholder in the United States wishes to attend and vote at the Meeting, they must first obtain a valid legal proxy from their broker, bank or other agent and then register in advance to attend the Meeting. The U.S. non-registered Shareholder should follow the instructions from their broker or bank included with these proxy materials, or contact their broker or bank to request a legal proxy form. After first obtaining a valid legal proxy from their broker, bank or other agent, the U.S. non-registered Shareholder must then register to attend the Meeting by submitting a copy of their legal proxy to Computershare. Requests for registration should be directed to:

Computershare  
100 University Avenue  
8th Floor  
Toronto, Ontario  
M5J 2Y1

OR

Email at: [uslegalproxy@computershare.com](mailto:uslegalproxy@computershare.com)

Requests for registration must be labeled as “Legal Proxy” and be received no later than by 5:00 p.m. (Toronto time) on May 29, 2020. U.S. non-registered Shareholders will receive a confirmation of their registration by email receipt of their registration materials by Computershare. U.S. non-registered Shareholders will then be able to attend the Meeting and vote and ask questions at <https://web.lumiagm.com/192484056>. U.S. non-registered Shareholders are required to register their appointment at [www.computershare.com/appointee](http://www.computershare.com/appointee). If U.S. non-registered Shareholders do not follow the procedures set out above, they will only be able to attend the Meeting as “Guests” and will not be able to vote or ask questions at the Meeting.

Shareholders should follow the instructions on the forms they receive, and non-registered Shareholders should contact their intermediaries promptly if they need assistance.

The proxy materials are being sent or made available to both registered and non-registered owners of Shares. The Corporation is sending proxy materials indirectly to non-objecting beneficial owners (as defined in National Instrument 54-101 - *Communication with Beneficial Owners of Securities of a Reporting Issuer* (“NI 54-101”). The Corporation intends to pay for intermediaries to forward to objecting beneficial owners (as defined in NI 54-101) the proxy materials.

#### ***How do I request a copy of proxy materials?***

To request a printed copy of the proxy materials, please contact your broker, if you are a non-registered Shareholder, or if you are a registered Shareholder, contact our Chief Financial Officer at Aptose Biosciences Inc., Suite 120, 12770 High Bluff Drive, San Diego, California, telephone: 858-926-2730.

#### ***What am I voting on at the Meeting?***

The following items of business will be covered at the Meeting:

1. receiving the financial statements of the Corporation for the fiscal year ended December 31, 2019, including the auditor’s report thereon;

2. Proposal No. 1 – electing seven directors to serve until the 2021 Annual Meeting of Shareholders;
3. Proposal No. 2 – appointing KPMG LLP as the independent registered public accounting firm of the Corporation for the fiscal year ending December 31, 2020; and
4. transacting such other business as may be properly brought before the Meeting.

As of the date of this Proxy Statement, the Board of Directors (the “Board”) is not aware of any such other business.

***How does the Board recommend that I vote?***

Our Board recommends that each Shareholder vote “**FOR**” each of the proposals listed above.

***What votes may I cast with regard to each proposal?***

You can choose to vote “For” or “Withhold” for Proposal No. 1 and “For”, “Against” or “Abstain”, for Proposal No. 2. The Shares represented by the proxy form will be voted in accordance with the instructions of the Shareholder on any ballot that may be called for and, if the Shareholder specifies a choice with respect to any matter to be acted upon, the Shares will be voted accordingly.

**If you return your proxy form and do not tell us how you want to vote your Shares, your Shares will be voted “FOR” each director nominee and each proposal by the management representatives named in the proxy.**

The enclosed form of proxy confers discretionary authority upon the management representatives designated in the form of proxy with respect to amendments to or variations of matters identified in the Notice of Meeting and with respect to other matters that may properly come before the Meeting. At the date of this Proxy Statement, management of the Corporation knows of no such amendments, variations or other matters.

***What vote is required in order to approve each proposal?***

- Proposal No. 1: Under our Majority Voting Policy, a director nominee who is elected in an uncontested election with a greater number of votes “Withheld” than votes “For” 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 will be expected to provide forthwith his or her resignation to the Board, effective on acceptance by the Board. Unless special circumstances apply, the Board will accept the resignation. Within ninety (90) days following the applicable meeting of the Shareholders, the Board will determine whether to accept or reject the resignation offer that has been submitted. Following the Board’s decision on the resignation, the Board will promptly disclose, via press release, its decision (including the reasons for rejecting the resignation offer, if applicable).
- Proposal No. 2: The appointment of KPMG LLP as our independent registered public accounting firm requires a majority of the votes cast at the Meeting, and votes cast only include those votes cast “For” or “Against” the proposal.

***What impact does a “Withhold” or “Abstain” vote have?***

- Proposal No. 1: If you select “Withhold” with respect to the election of a nominee, your vote will have no effect on the votes cast for the purposes of electing such nominee but will be considered in the application of our Majority Voting Policy which is described above.
- Proposal No. 2: If you select “Abstain,” your vote will have no effect on the votes cast for the purposes of approving this proposal.

***What is the effect if I do not cast my vote?***

If as a registered Shareholder you do not cast your vote in person or by proxy, no votes will be cast on your behalf on any of the proposals.

If you are a U.S. beneficial shareholder with an intermediary, you must instruct your U.S. intermediary how to vote your shares. If, as a U.S. non-registered or beneficial Shareholder, you do not instruct your intermediary on how to vote on any of the proposals at the Meeting, the intermediary has discretionary authority to vote your shares on Proposal No. 2, but the intermediary does not have discretionary authority to vote your shares on Proposal No. 1 or any unusual item, so a “broker non-vote” will be recorded with respect to such item. Broker non-votes will be treated as not entitled to vote on any such matter and will not be counted as having been voted in respect of any such matter. Shares represented by such broker “non-votes” will, however, be counted in determining whether there is a quorum for the Meeting.

***How do I change my vote?***

A registered Shareholder who has given a proxy may revoke that proxy and change a vote by:

- (a) completing and signing a proxy bearing a later date and depositing it with Computershare as described above;
- (b) depositing an instrument in writing executed by the Shareholder or by the Shareholder’s attorney authorized in writing at our registered office at any time before 5:00 p.m. (Toronto time) on June 1, 2020, or on the last business day before any adjournment of the Meeting at which the proxy is to be used;
- (c) using your 15-digit control number and voting online at the Meeting; or
- (d) in any other manner permitted by law.

A non-registered or beneficial Shareholder may revoke a voting instruction form or a waiver of the right to receive proxy materials and to vote given to an intermediary or to the Corporation, as the case may be, at any time by written notice to the intermediary or the Corporation, except that neither an intermediary nor the Corporation is required to act on a revocation of a voting instruction form or on a waiver of the right to receive materials and to vote that is not received by such intermediary or the Corporation, at least seven days prior to the Meeting.

***What does it mean if I receive more than one set of proxy materials?***

This means that you own Shares that are registered under different accounts. For example, you may own some Shares directly as a registered Shareholder and other Shares as a non-registered beneficial Shareholder through an intermediary, or you may own Shares through more than one such organization. In these situations, you will receive multiple sets of proxy materials. It is necessary for you to complete and return all proxy cards and VIFs in order to vote all of the Shares you own. Please make sure you return each proxy card or VIF in the accompanying return envelope. You may also vote by Internet, telephone, facsimile or email, as applicable, by following the instructions on your proxy materials.

***How will proxies be solicited and who will pay the cost of the proxy solicitation?***

The solicitation of proxies will be primarily by mail, but Aptose’s directors, officers and regular employees may also solicit proxies personally or by telephone. Aptose will bear all costs of the solicitation, including the printing, handling and mailing of the Meeting materials. Aptose has arranged for intermediaries to forward the Meeting materials to non-registered or beneficial Shareholders of record, and Aptose may reimburse the intermediaries for their reasonable fees and disbursements in that regard.



### ***How can I make a Shareholder proposal for the 2021 Annual General Meeting?***

If you want to propose a matter for consideration at our 2021 Annual General Meeting, and for inclusion in the proxy statement, then that proposal must be received at our registered office at 251 Consumers Road, Suite 1105, Toronto, ON M2J 4R3 by January 25, 2021. For a proposal to be valid, it must comply with the *Canada Business Corporations Act* (the “CBCA”) and the *Securities Exchange Act of 1934* (United States) (the “Exchange Act”).

In order for a Shareholder proposal to be eligible under the CBCA, it must be in writing, accompanied by the requisite declarations and signed by the submitter and qualified Shareholders who at the time of signing are the registered or beneficial owners of shares that, in the aggregate: (a) constitute at least 1% of our issued Shares that have the right to vote at general meetings; or (b) have a fair market value in excess of CA\$2,000. For the submitter or a qualified Shareholder to be eligible to sign the proposal, that Shareholder must have been the registered or beneficial owner of our Shares that carry the right to vote at general meetings for an uninterrupted period of at least six months before the date the proposal is submitted.

In order for a Shareholder proposal to be eligible for inclusion in the proxy statement under the Exchange Act, the Shareholder must submit the proposal in accordance with Rule 14a-8, and the Shareholder must have continuously held at least CA\$2,000 in market value, or 1%, of the Shares entitled to be voted on the proposal at the meeting, for at least one year by the date the Shareholder submits the proposal. The Shareholder must continue to hold those Shares through the date of the meeting.

A Shareholder wishing to nominate an individual to be a director, other than pursuant to a requisition of a meeting made pursuant to the CBCA or a Shareholder proposal made pursuant to the CBCA provisions described above, is required to comply with Section 3.1 of the Advance Notice Bylaw. Section 3.1 of the Bylaw provides, inter alia, that proper written notice of any such director nomination (the “Nomination Notice”) for an annual general meeting of Shareholders must be provided to the Secretary of the Corporation not less than 30 days prior to the date of the annual general meeting of Shareholders; provided, however, that in the event that the annual general meeting of Shareholders is to be held on a date that is less than 50 days after the date (the “Notice Date”) on which the first public announcement of the date of the annual general meeting was made, the Nomination Notice must be provided no later than the close of business on the tenth day following the Notice Date. The foregoing is merely a summary of provisions contained in Section 3.1 of the Advance Notice Bylaw, and is not comprehensive and is qualified by the full text of such provisions. The full text of such provisions is set out in Section 3.1 of the Advance Notice Bylaw, a copy of which is filed under the Corporation’s profile at [www.sedar.com](http://www.sedar.com) or [www.sec.gov](http://www.sec.gov). For such Shareholder’s director nominee to be eligible for inclusion in the proxy statement, however, such nomination must be received by our registered office by January 7, 2021.

### ***What if amendments are made to the proposals or if other matters are brought before the Meeting?***

With respect to any amendments or variations in any of the proposals shown in the Proxy Statement, or any other matters which may properly come before the Meeting, the Shares will be voted by the appointed proxyholder as he or she in their sole discretion sees fit.

As of the date of this Proxy Statement, the Board is not aware of any such amendments, variations or other matters to come before the Meeting. However, if any such changes that are not currently known to the Board should properly come before the Meeting, the Shares represented by your proxyholders will be voted in accordance with the best judgment of the proxyholders.

***Who will tabulate the votes?***

We currently expect that Computershare and Lumi will tabulate the votes, and our Corporate Secretary will be our inspector of elections for the Meeting.

***When will voting results be disclosed?***

Preliminary voting results will be announced at the Meeting. Final voting results will be filed with the Canadian provincial securities regulatory authorities on SEDAR at [www.sedar.com](http://www.sedar.com), and will also be published in a Current Report on Form 8-K filed with the SEC on EDGAR at <https://www.sec.gov> within four business days of the Meeting.

***Whom do I contact if I have questions regarding the Meeting?***

If you have any questions or require assistance in voting your Shares, please call Mr. Gregory Chow, Senior Vice President, Chief Financial Officer and Corporate Secretary, at 858-926-2730.

***Who may adjourn the Meeting?***

The Meeting may be adjourned to any other time and any other place by the Shareholders who attend the Meeting or who are represented at the Meeting and entitled to vote even when such Shareholders do not constitute a quorum.

**CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS**

This proxy statement contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Exchange Act, and are subject to the safe harbor created by those sections. This proxy statement also contains “forward-looking information” within the meaning of applicable Canadian securities laws. We refer to such forward-looking statements and forward-looking information collectively as “forward-looking statements”. We have identified some of these forward-looking statements with words like “believe,” “may,” “could,” “would,” “might,” “possible,” “potential,” “will,” “should,” “expect,” “intend,” “plan,” “predict,” “anticipate,” “estimate,” “contemplate” and “continue”, the negative of these words, other words and terms of similar meaning and the use of future dates. Forward-looking statements involve risks and uncertainties. These uncertainties include factors that affect all businesses as well as matters specific to us.

Forward-looking statements by their nature address matters that are, to different degrees, uncertain. Uncertainties and risks may cause our actual results to be materially different than those expressed in or implied by our forward-looking statements. For us, particular uncertainties and risks include those described in our filings with the Securities and Exchange Commission (the “SEC”), including our most recent Annual Report on Form 10-K for the year ended December 31, 2019. A copy of this document can be found by accessing the SEC’s EDGAR filing database at [www.sec.gov](http://www.sec.gov) and on SEDAR at [www.sedar.com](http://www.sedar.com); however we will promptly provide a copy of this document to any Shareholder of the Corporation free of charge upon request. All forward-looking statements in this proxy statement speak only as of the date of this proxy statement and are based on our current beliefs and expectations. We undertake no obligation to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise, except as otherwise required by law.

## VOTING SECURITIES AND PRINCIPAL HOLDERS OF VOTING SECURITIES

As of April 23, 2020, 76,273,719 Shares are issued and outstanding. Each holder of Shares of record at the close of business on April 23, 2020, the record date established for notice of the Meeting, will be entitled to one vote for each Share held on all matters proposed to come before the Meeting, except to the extent that the Shareholder has transferred any Shares after the record date and the transferee of such Shares establishes ownership of them and makes a written demand, not later than 10 days prior to the Meeting, to be included in the list of Shareholders entitled to vote at the Meeting, in which case the transferee will be entitled to vote such Shares.

### SHARE OWNERSHIP OF CERTAIN BENEFICIAL OWNERS, MANAGEMENT AND DIRECTORS

The table below sets forth information known to us regarding the beneficial ownership of our Shares as of April 23, 2020 for:

- each person the Corporation believes beneficially holds more than 5% of the outstanding shares of our Shares based solely on our review of SEC filings;
- each of our directors and nominees for directors;
- each of the named executive officers named in the Summary Compensation Table (we collectively refer to these persons as our “Named Executive Officers”); and
- all of our directors and executive officers as a group.

The number of Shares beneficially owned by a person includes shares subject to options held by that person that are currently exercisable or that become exercisable within 60 days of April 23, 2020. Percentage calculations assume, for each person and group, that all Shares that may be acquired by such person or group pursuant to options currently exercisable or that become exercisable within 60 days of April 23, 2020 are outstanding for the purpose of computing the percentage of Shares owned by such person or group. However, such unissued Shares described above are not deemed to be outstanding for calculating the percentage of Shares owned by any other person.

Except as otherwise indicated, the persons in the table below have sole voting and investment power with respect to all Shares shown as beneficially owned by them, subject to community property laws where applicable and subject to the information contained in the notes to the table.

Name of Beneficial Owner		Amount and Nature of Beneficial Ownership <sup>(1)</sup>		Percent of Class	
<b><i>Named Executive Officers and Directors</i></b>					
Carol G. Ashe		52,500		*	
Dr. Denis Burger		176,588		*	
Gregory K. Chow		1,330,350		1.7%	
Caroline Loewy		58,750		*	
Dr. Jotin Marango		360,000		*	
Dr. Erich Platzer		270,000		*	
Dr. William G. Rice		2,180,047		2.9%	
Mark D. Vincent		160,583		*	
Warren Whitehead		202,500		*	
<b><i>All Executive Officers and Directors as a Group</i></b> (ten persons)		4,791,319		6.3%	
<b><i>Beneficial Owners of More Than 5%</i></b>					
Herbert Abramson <sup>(2)</sup>		4,110,000		5.4%	
Consonance Capman GP LLC <sup>(3)</sup>		4,772,192		6.3%	
Nantahala Capital Management, LLC <sup>(4)</sup>		6,053,830		7.9%	
Opaleye Management Inc. <sup>(5)</sup>		4,085,000		5.4%	

*Does not exceed one percent of common shares outstanding	
(1)	Includes for the persons listed below the following Shares subject to options held by such persons that are currently exercisable or become exercisable within 60 days of April 23, 2020: Ms. Carol G. Ashe: 52,500; Dr. Rafael Bejar: nil; Dr. Denis Burger: 160,334, Mr. Gregory K. Chow: 1,195,836; Ms. Caroline Loewy: 58,750; Dr. Jotin Marango: 320,000; Dr. Erich Platzer: 135,000; Dr. William G. Rice: 2,013,633; Dr. Mark Vincent: 154,083; and Mr. Warren Whitehead: 152,500.
(2)	Based on information contained in a Schedule 13G/A filed with the SEC on February 4, 2020 by Herbert Abramson, 22 St. Clair Avenue East, 18th Floor, Toronto, Ontario, Canada, M4T 2S3. The filing indicated that as of December 31, 2019, Mr. Abramson had sole voting and dispositive power over all of these shares, of which 103,611 shares are held through Technifund Inc., an investment holding company of which Mr. Abramson holds 100% of the outstanding preferred shares and serves as President and sole Director.
(3)	Based on information contained in a schedule 13G filed with the SEC on February 14, 2020 by Consonance Capital Management LP, Consonance Capital Opportunity Fund Management LP, Mitchell Blutt and Consonance Capman GP LLC, 1370 Avenue of America, Floor 33, New York, NY, 10019, United States of America. The filing indicates that, as of December 31, 2019, Consonance Capman GP LLC and Mitchell Blutt beneficially owned and had shared voting and dispositive power over an aggregate of 4,772,192 shares, 4,085,058 of which are also beneficially owned by Consonance Capital Management LP (who has shared voting and dispositive power over such shares) and 687,132 of which are also beneficially owned by Consonance Capital Opportunity Fund Management LP (who has shared voting and dispositive power over such shares.)
(4)	Based on information contained in a schedule 13G filed with the SEC on February 14, 2020 by Nantahala Capital Management, LLC, 130 Main St. 2nd Floor, New Canaan, CT, 06840, United States of America. The filing indicates that, as of December 31, 2019, Nantahala Capital Management, LLC may be deemed to be the beneficial of 6,053,830 shares held by funds and separately managed accounts under its control, and as the managing members of Nantahala Capital Management, LLC, each of Wilmot B. Harkey and Daniel Mack may be deemed to be a beneficial owner of those shares.
(5)	Based on information contained in a Schedule 13G filed with the SEC on December 27, 2019 by Opaleye Management Inc., One Boston Place, 26th Floor, Boston, MA, 02108, United States of America. The filing indicates that as of December 17, 2019, Opaleye, L.P., a private fund formed in the state of Delaware, Opaleye Management Inc. the investment manager serving as investment manager with respect to the common shares held by Opaleye, L.P. and Mr. James Silverman, president of Opaleye Management Inc. had shared voting power and shared dispositive power over an aggregate of 4,085,000 shares.

#### RECEIPT OF FINANCIAL STATEMENTS

At the Meeting, Shareholders will receive and consider the financial statements of the Corporation for the fiscal year ended December 31, 2019 and the auditor's report thereon, but no vote by the Shareholders with respect thereto is required or proposed to be taken.

#### PROPOSAL NO. 1—ELECTION OF DIRECTORS

Pursuant to the articles of the Corporation, the number of directors of the Corporation is set at a minimum of three and a maximum of eleven, and the Board is authorized to determine the actual number of directors to be elected from time to time. The Corporation currently has seven directors, all of whom are being proposed for nomination at the Meeting. Unless they resign, all directors elected at the Meeting will hold office until our next annual meeting of Shareholders or until their successors are elected or appointed.

On February 24, 2014, the Board adopted a majority voting policy (the “Majority Voting Policy”, also known as a “plurality-plus” standard). The Majority Voting Policy applies to this election of directors. Under such policy, a director nominee who is elected in an uncontested election with a greater number of votes “Withheld” than votes “For” 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 will be expected to provide forthwith his or her resignation to the Board, effective on acceptance by the Board. Unless special circumstances apply, the Board will accept the resignation. Within 90 days following the applicable meeting of the Shareholders, the Board will determine whether to accept or reject the resignation offer that has been submitted. Following the Board’s decision on the resignation, the Board will promptly disclose, via press release, its decision (including the reasons for rejecting the resignation offer, if applicable).

The following incumbent directors of the Corporation are nominated for election at the Meeting.

Director	Experience and Qualifications
<p>Carol G. Ashe<sup>(2)(3)</sup>  Pennsylvania, United States</p> <p>Director Since August 2018</p>	<p>Ms. Ashe, age, 62, has been the Chief Business Officer at the New York Genome Center, an independent, non-profit academic research institution focused on furthering genomic research that leads to scientific advances and new insights and therapies for patients with neurodegenerative disease, neuropsychiatric disease, and cancer, since 2014. Previously, she served as Vice President of Corporate Development for Endo’s branded, generic and platform drug delivery pharmaceutical business units from 2011 to 2013; a Partner at SR One, the corporate venture capital fund of GlaxoSmithKline, from 2008 to 2010; and head of GSK’s US Corporate Legal Group supporting US-based mergers, acquisitions and equity investments from 2007 to 2008. Prior to that, Ms. Ashe led GSK’s global Business Development Transactions Legal Team supporting both the pharmaceutical and consumer healthcare business units from 1995 to 2007. Ms. Ashe received her BS degree in Biology from Pennsylvania State University, her law degree from Villanova University School of Law and is a registered patent attorney.</p>
<p>Dr. Denis Burger<sup>(1)(2)(4)</sup>  Oregon, United States</p> <p>Director Since 2007</p>	<p>Ms. Ashe makes valuable contributions to the Board based on over 25 years of experience in the pharmaceutical and biotechnology industry in business development and as legal counsel for business development transactions and patent matters.</p> <p>Dr. Burger, age 76, co-founded Trinity Biotech, PLC, a diagnostic biotechnology company based in Dublin, Ireland, in 1992, served as Chairman from 1992 to 1995, and now serves as lead director on its Board of Directors. Dr. Burger served as the Chairman, Chief Executive Officer and a Director of AVI Biopharma Inc., an Oregon-based biotechnology company, from 1996 to 2007. Dr. Burger has also been the sole member of Paradigm Ventures LLC, a healthcare consulting and funding firm based in Portland, Oregon, since 1990. He was a co-founder and Chairman of Epitope Inc. from 1981 to 1990. Dr. Burger was Vice Chairman and Chief Scientific Officer of CytoDyn Inc. from 2016 to 2018. Dr. Burger has served as President of Yamhill Valley Vineyards since 1983. In addition, Dr. Burger previously held a professorship in the Department of Microbiology and Immunology and Surgery (Surgical Oncology) at the Oregon Health Sciences University in Portland. Dr. Burger received his M.Sc. and Ph.D. in Microbiology and Immunology from the University of Arizona.</p> <p>Dr. Burger serves on the board of directors of Trinity Biotech, PLC. (1992 to present)* and previously served on the board of directors of CytoDyn Inc. (2014 to 2018)*.</p>

Director	Experience and Qualifications
<p>Caroline M. Loewy<sup>(1)(3)</sup> California, United States</p> <p>Director Since April 2018</p>	<p>Dr. Burger makes valuable contributions to the Board based on his Ph.D. in microbiology and immunology, and his more than 25 years of experience in the biotechnology industry as a senior executive and as a corporate director.</p> <p>Ms. Loewy, age 54, co-founded and served as Chief Financial Officer and Chief Business Officer of Achieve Life Sciences, Inc., a clinical-stage pharmaceutical company, from 2015 to 2017. Prior to that, she held the position of Chief Financial Officer of both public and private biopharmaceutical companies including Tobira Therapeutics, Inc. from 2012 to 2014, Corcept Therapeutics Incorporated from 2008 to 2011, and Poniard Pharmaceuticals, Inc. from 2006 to 2008. Ms. Loewy also spent 11 years as a senior biotechnology equity research analyst at Morgan Stanley and Prudential Securities. She is a founding board member of the Global Genes Project, one of the leading rare disease patient advocacy organizations in the world, and she is a member of the National Advisory Council of the Translational Genomics Research Institute (TGen) Center for Rare Childhood Disorders. She is also a founding board member of the KCNQ2 Cure Alliance Foundation. Ms. Loewy holds a BA degree from the University of California, Berkeley, and an MBA/MS degree from Carnegie Mellon University.</p> <p>Ms. Loewy serves on the boards of directors of CymaBay Therapeutics Inc. (2016 to present)* and PhaseBio Pharmaceuticals Inc. (2018 to present)*.</p> <p>Ms. Loewy makes valuable contributions to the Board based on more than 25 years of experience in assessing and accelerating biotechnology product development and growth and her financial expertise as a chief financial officer.</p>
<p>Dr. Erich Platzer<sup>(2)</sup> Basel, Switzerland</p> <p>Director Since 2014</p>	<p>Dr. Platzer, age 69, served as a board certified physician in internal medicine, hematology and medical oncology between 1979 and 1991. In 2001, Dr. Platzer co-founded HBM Healthcare Investments (formerly HBM BioVentures), a global leader in healthcare investing and served as their investment advisor until 2015. Previously, he served as the business director of oncology, as well as the global strategic marketing and therapeutic area head of oncology at Roche, Basel. He also served in various other leadership roles at Roche and was responsible for various strategic corporate partnerships. He has over 12 years of experience in academic medicine and research and was a key member of the team at MSKCC that purified human G-CSF in 1983 (recombinant form: Neupogen®). He earned his M.D. from the Medical School of the University of Erlangen, where he also received his “Dr. med. habil.” (M.D., Ph.D.).</p> <p>Dr. Platzer has served as a pharmaceutical industry expert on the board of directors of multiple biotech companies in both the U.S. and Europe. Currently he serves as chairman of Vivoryon Therapeutics AG, AOT, Léman Micro Devices, and Credentis, as well as a board member of Peripal and as a director and venture partner of MedTech Innovation Partners, MTIP, a Swiss VC firm focusing on MedTech and eHealth. He has also served as the president of Swiss business angel group StartAngels since 2015.</p> <p>Dr. Platzer makes valuable contributions to the Board based on over twenty-five years’ experience in the biotechnology industry as a physician in hematology and medical oncology, as a corporate executive, and as a corporate director.</p>

Director	Experience and Qualifications
<p>Dr. William G. Rice California, United States</p> <p>Director Since 2013</p>	<p>Dr. Rice, age 61, joined Aptose as Chairman and Chief Executive Officer in October 2013. Prior to joining Aptose, Dr. Rice served as the President, Chief Executive Officer and Chairman of the board of Cylene Pharmaceuticals, Inc., a private biotechnology company from 2003 to 2013. Prior to Cylene, Dr. Rice was the founder, President, Chief Executive Officer and Director of Achillion Pharmaceuticals, Inc. from 1990 to 2003. He also served as Senior Scientist and Head of the Drug Mechanism Laboratory at the National Cancer Institute-Frederick Cancer Research and Development Center from 1992 to 1998, and served as a faculty member in the division of Pediatric Hematology and Oncology at Emory University School of Medicine from 1989 to 1992. Dr. Rice received his Ph.D. from Emory University Department of Biochemistry.</p> <p>Dr. Rice continues to serve as the Chairman of the board of Cylene and is a member of the board of directors of Oncolytics Biotech Inc. (2015 to present)*.</p> <p>Dr. Rice makes valuable contributions to the Board based on his Ph.D. in Biochemistry, and his over 25 years of experience in the biotechnology industry as a senior executive and as a corporate director.</p>
<p>Dr. Mark D. Vincent<sup>(3)</sup> Ontario, Canada</p> <p>Director Since 2007</p>	<p>Dr. Vincent, age 67, has been a Professor of Oncology at the University of Western Ontario since 2008 and a staff medical oncologist at the London Regional Cancer Program since 1990. Dr. Vincent has also served as the co-founder and Chief Executive Officer of Sarissa, Inc., a private company actively involved in the development of compounds which potentiate existing, approved targeted drugs including agents approved in leukemia, since 2000 and has recently been appointed to the Advisory Board of Drug Royalty Corp Toronto. Dr. Vincent holds multiple patents on the potentiation of cancer chemotherapy by the manipulation of drug resistance genes, sits on the advisory boards and speakers panels of several major pharmaceutical companies, and is a frequent international lecturer on the positioning of new drugs in the complex evolving management of lung and gastro-intestinal cancer. Dr. Vincent completed his oncology training at the Royal Marsden Hospital on London, England, with a major focus on leukemia/lymphoma.</p> <p>Dr. Vincent makes valuable contributions to the Board based on over 25 years of experience as a medical oncologist.</p>

Director	Experience and Qualifications
Warren Whitehead <sup>(1)</sup> Ontario, Canada  Director Since 2011	<p>Mr. Whitehead, age 68, served as the Chief Financial Officer of ProMIS Neurosciences Inc. (formerly Amorfix Life Sciences Ltd.) from 2013 to 2015, a TSX-listed company targeting detection and effective treatment of Alzheimer's disease and amyotrophic lateral sclerosis. Previously, from 2006 to 2008, he was the Chief Financial Officer of Arius Research Inc., a TSX-listed company developing anti-cancer antibodies, where he provided financial guidance and leadership during the acquisition of Arius by Roche in 2008. He was also the former Chief Financial Officer of Labopharm Inc. from 2000 to 2006, where he completed a series of public equity financings, including a cross-border Nasdaq offering. Other positions include Chief Financial Officer of Resolution Pharmaceuticals Inc., and a position in finance and business development at Glaxo Canada (now GlaxoSmithKline). Mr. Whitehead holds an MBA, and BComm from the University of Windsor and a BA from the University of Western Ontario.</p> <p>Mr. Whitehead was the former Chairman and board member of Plantform Corporation and a former Board Member of Telesta Therapeutics (TSX), which was acquired by Prometic Life Sciences in 2016.</p> <p>Mr. Whitehead makes valuable contributions to the Board based on his financial expertise as a Chartered Professional Accountant (CPA) and a Certified Management Accountant (CMA) who has held chief financial officer roles at publicly traded pharmaceutical and biotechnology firms.</p>
<ol style="list-style-type: none"> <li>1. Member of the Audit Committee.</li> <li>2. Member of the Compensation Committee.</li> <li>3. Member of the Corporate Governance and Nominating Committee.</li> <li>4. Lead Director of the Corporation.</li> </ol> <p>* SEC reporting issuer</p>	

No proposed director is, to the knowledge of the Corporation as at the date of the Proxy Statement, or has been, within 10 years before the date of this Proxy Statement, a director, chief executive officer or chief financial officer of any company (including Aptose) that: (i) was subject to a cease trade order, an order similar to a cease trade order or an order that denied the relevant company access to any exemption under Canadian securities legislation that was in effect for a period of more than 30 consecutive days, (ii) was subject to cease trade order, an order similar to a cease trade order or an order that denied the relevant company access to any exemption under Canadian securities legislation that was in effect for a period of more than 30 consecutive days that was issued after the proposed director ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer, (iii) while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets, or (iv) become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the proposed director.



Moreover, no proposed director of the Corporation has been subject, to the knowledge of the Corporation, to (i) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority, or (ii) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable securityholder in deciding whether to vote for a proposed director.

#### **Board Recommendation**

**The Board recommends a vote FOR the election of all nominees for directors named in this proxy statement.**

#### **CORPORATE GOVERNANCE**

Corporate governance relates to the activities of the Board, the members of which are elected by and are accountable to the Shareholders, and takes into account the role of the individual members of management who are appointed by the Board and who are charged with the day-to-day management of Aptose. The Board believes that sound corporate governance practices are essential to contributing to the effective and efficient decision-making of management and the Board and to the enhancement of Shareholder value. The Board and management believe that Aptose has a sound governance structure in place for both management and the Board. Of particular note, Aptose has:

- a Board elected annually by a Majority Voting Policy, with an established a written mandate;
- standing committees composed entirely of independent directors;
- an independent Lead Director;
- annual assessments of the Board, each committee and individual directors;
- established a written Disclosure and Insider Trading Policy; and
- established a written Code of Ethics.

Each of the committee charters and the Code of Ethics can be found on the Corporation's website at <https://ir.aptose.com/corporate--governance>.

**National Instrument 58-101 — *Disclosure of Corporate Governance Practices* ("NI 58-101") and National Policy 58-201 — *Corporate Governance Guidelines* ("NP 58-201") requires issuers, including Aptose, to disclose the corporate governance practices that they have adopted. NP 58-201 provides guidance on governance practices. The Corporation is also subject to National Instrument 52-110 – *Audit Committees* ("NI 52-110"), which has been adopted in various Canadian provinces and territories and which prescribes certain requirements in relation to audit committees.**

#### **Board Mandate**

The Board has adopted a mandate in which it explicitly assumes responsibility for stewardship of the Corporation. The Board is mandated to represent the Shareholders to ensure appropriate succession planning is in place, select the appropriate chief executive officer, assess and approve the strategic direction of the Corporation, ensure that appropriate processes for risk assessment, management and internal control are in place, monitor management performance against agreed benchmarks, and assure the integrity of financial reports. A copy of the Board Mandate is attached hereto as Appendix A.

## Composition and Independence of the Board

The Corporation's Board is currently composed of seven directors, a majority (six) of whom meet the independence standards under the listing standards of Nasdaq and NI 52-110. Each year the Board reviews the composition of the Board and assesses whether a Board member is "independent".

Director	Independence
Carol Ashe	Yes
Denis Burger	Yes
Caroline Loewy	Yes
Erich Platzer	Yes
William G. Rice	No
Mark Vincent	Yes
Warren Whitehead	Yes

Dr. William G. Rice, Ph.D., Chairman, President and Chief Executive Officer of the Corporation is not an independent director because of his role in the Corporation's management team.

The following table outlines other reporting issuers where our directors serve on the board:

Director	Reporting Issuer
William G. Rice	Oncolytics Biotech Inc.
Denis Burger	Trinity Biotech plc
Caroline M. Loewy	CymaBay Therapeutics Inc. PhaseBio Pharmaceuticals Inc.
Erich Platzer	Vivoryon Therapeutics AG

## Board Leadership

In 2014, further to the appointment of Dr. William G. Rice, Ph.D. as Chairman of the Board and Chief Executive Officer, the Corporation created the position of Lead Director to ensure that the directors have an independent leadership contact and maintain and enhance the quality of the Corporation's corporate governance practices. Dr. Denis Burger, an independent director, is currently the Lead Director. The Lead Director provides leadership to the Board in discharging its mandate and also assists the Board in discharging its stewardship function, which includes (i) satisfying itself as to the integrity of the Chief Executive Officer and the other senior officers of the Corporation and that the Chief Executive Officer and other senior officers create a culture of integrity throughout the organization; (ii) strategic planning; (iii) identifying and managing risks; (iv) succession planning; (v) adopting a disclosure policy; (vi) internal control and management information systems; and (vii) the Corporation's approach to corporate governance. In addition, the Lead Director provides advice, counsel and mentorship to the Chief Executive Officer.

## **Board Oversight of Risk**

With regard to risk management, the Board will ensure that the business of the Corporation is conducted in compliance with applicable laws and regulations and according to the highest ethical standards; will identify and document the financial risks and other risks that the Corporation faces in the course of its business and ensure that such risks are appropriately managed; and will adopt a disclosure policy.

The Board of Directors as a whole has responsibility for risk oversight, with more in-depth reviews of certain areas of risk being conducted by the relevant Board committees that report on their deliberations to the full Board of Directors. The Board and its committees fulfill their oversight responsibilities with the supported of management, whose reporting processes are designed to provide information to the Board about the identification, assessment and management of critical risks and management's risk mitigation strategies. Areas of risk evaluated include regulatory, operational, financial (accounting, liquidity and tax), legal, compensation, competitive, health, safety and reputational risks.

The standing committees of the Board of Directors oversee risks associated with their respective principal areas of focus. The Audit Committee's role includes a particular focus on the qualitative aspects of financial reporting to stockholders, on our processes for the management of business and financial risk, our financial reporting obligations and for compliance with significant applicable legal, ethical and regulatory requirements. The Audit Committee, along with management, is also responsible for developing and participating in a process for review of important financial and operating topics that present potential significant risk to the Corporation. The Compensation Committee is responsible for overseeing risks and exposures associated with our compensation programs and arrangements, including our executive and director compensation programs and arrangements, and management succession planning. The Governance and Nominating Committee oversees risks relating to our corporate governance matters and policies and director succession planning.

We recognize that a fundamental part of risk management is understanding not only the risks a company faces and what steps management is taking to manage those risks, but also understanding what level of risk is appropriate for that company. Through their involvement in setting our business strategy, the Board can assess management's appetite for risk and also determine what constitutes an appropriate level of risk for the Corporation.

We believe our current Board leadership structure is appropriate and helps ensure proper risk oversight for the Corporation. The full Board of Directors conducts general risk oversight in connection with its role in reviewing our key long-term and short-term business strategies and monitoring on an on-going basis the implementation of our key business strategies, while our standing Board committees conduct more specific risk oversight related to their responsibilities. The Chair ensures that there is sufficient time on the Board agenda for risk management discussions.

## **Nomination of Directors**

Directors of the Corporation are expected to bring to the Board the broadest possible knowledge and depth of experience from their chosen business or profession. Directors should evidence a demonstrated ability to deal with business, financial and social issues, both nationally and internationally. This implies a capacity to provide additional strength, diversity of views and up-to-date perceptions to the Board and its deliberations. It is the mandate of the Corporate Governance and Nominating Committee to identify and recommend qualified candidates for the Board. In assessing whether identified candidates are suitable for the Board, the Corporate Governance and Nominating Committee considers: (i) the competencies and skills considered necessary for the Board as a whole; (ii) the competencies and skills that the existing directors possess and the competencies and skills nominees will bring to the Board; and (iii) whether nominees can devote sufficient time and resources to his or her duties as a member of the Board. Potential candidates for membership on the Board will not be denied consideration by reason of race, sex, religion or affiliation with some special constituency group, nor will any candidate be selected solely for such reason.

It is the Corporate Governance and Nominating Committee's policy to consider director candidates recommended by our Shareholders in accordance with the provisions set forth in our Advance Notice By-Law, which may be accessed on our website at [www.aptose.com](http://www.aptose.com) in the Investors section. Candidates recommended by the Corporation's Shareholders will be considered by the Corporate Governance and Nominating Committee and, as stated in the Corporate Governance and Nominating Committee Charter, such candidates shall be evaluated in the same manner as all other director candidates. During 2019, we received no recommendations of director candidates from our Shareholders. Shareholders who wish to suggest a candidate for our Board may submit a written recommendation to our Secretary at 251 Consumers Road, Suite 1105, Toronto, ON M2J 4R3 along with the Shareholder's name, setting forth, among other things:

- the name, age, and province or state, and country of residence of the proposed nominee;
- the principal occupation, business or employment of the proposed nominee, both at present and within the five years preceding the recommendation;
- the number of securities of each class of voting securities of the Corporation or its subsidiaries which are beneficially owned, or controlled or directed, directly or indirectly, by the proposed nominee as of the record date for the meeting of Shareholders (if such date shall then have been made publicly available and shall have occurred) and as of the date of such notice;
- a description of any agreement, arrangement or understanding (financial, compensation or indemnity related or otherwise) between the nominating Shareholder and the proposed nominee, or any affiliates or associates of, or any person acting jointly or in concert with the nominating Shareholder or the proposed nominee, in connection with the proposed nominee's election as director; and
- whether the proposed nominee is party to any existing or proposed relationship, agreement, arrangement or understanding with any competitor of the Corporation or its affiliates or any other third party which may give rise to a real or perceived conflict of interest between the interests of the Corporation and the interests of the proposed nominee.

The Corporate Governance and Nominating Committee may also request that the Shareholder provide certain additional information.

For the Board to consider a candidate for nomination at the 2021 Annual Meeting, Shareholders should submit the required information to the Secretary by the date not less than 30 days before the 2021 Annual Meeting; provided, however, that if the 2021 Annual Meeting is to be held on a date that is fewer than 50 days after the date (the "Notice Date") on which the first public announcement of the meeting was made, notice by the nominating Shareholder may be given not later than the close of business on the tenth day following the Notice Date.

### **Diversity**

The Corporate Governance and Nominating Committee takes diversity, including diversity of experience, perspective and education, as well as individuals from other designated groups such as women, Aboriginal people, persons with disabilities and members of visible minorities (collectively, the "**Designated Groups**"), into consideration as part of its overall recruitment and selection process in respect of its Board and management. The Corporation does not have a formal policy on the representation of women or other members of the Designated Groups on the Board or management of the Corporation. The Board does not believe that a formal policy will necessarily result in the identification or selection of the best candidates. As such, the Corporation does not see any meaningful value in adopting a formal policy in this respect at this time as it does not believe that it would further enhance diversity, including gender diversity, beyond the current recruitment and selection process carried out by the Corporate Governance and Nominating Committee. However, the Board is mindful of the benefit of diversity on the Board and management of the Corporation and the need to maximize the effectiveness of the Board and management and their respective decision-making abilities.

The Corporate Governance and Nominating Committee believes that having a diverse Board and management team offers a depth of perspective and enhances Board and management operations. The Corporate Governance and Nominating Committee values diversity of experience, perspective, education and race, and considers the representation of women and other members of the Designated Groups, as part of its overall annual evaluation of director nominees for election or re-election as well as candidates for management positions.

In addition, in searches for new directors or officers, the Corporate Governance and Nominating Committee will consider the level of representation of women and other members of the Designated Groups on the Board and in management and this will be one of several factors used in its search process. This will be achieved through continuously monitoring the level of representation of women and other members of the Designated Groups on the Board and in management positions and, where appropriate, recruiting qualified candidates who are members of the Designated Groups as part of the Corporation's overall recruitment and selection process to fill Board or management positions, as the need arises, through vacancies, growth or otherwise.

The Board has not adopted targets regarding the representation of women and other members of Designated Groups on the Board and in executive officer positions due to the small size of the Corporation and the need to consider a balance of criteria in each individual appointment. It is important that each appointment to the Board or in executive officer positions be made, and be perceived as being made, on the merits of the individual and the needs of the Corporation at the relevant time. In addition, targets based on specific criteria such as gender or race, could limit the Board's ability to ensure that the overall composition of the Board or management of the Corporation meets the needs of the Corporation.

Currently, two out of seven members (29%) of the Board are women. There are otherwise no members of the Board or executive officers of the Corporation from the Designated Groups (0%).

#### **Director Term Limits and Other Mechanisms of Board Renewal**

The Board has not adopted term limits for directors or other mechanisms of board renewal at this time as it believes that the imposition of director term limits or other mechanisms of board renewal on a board implicitly discounts the value of experience and continuity amongst the board members and runs the risk of excluding experienced and potentially valuable board members as a result of arbitrary determination. The Board believes that it can best strike a balance between continuity and fresh perspectives without mandated term limits or other mechanisms of board renewal.

## **Position Descriptions**

The Board has developed written position descriptions, which are reviewed annually, for the Chair and the chairs of each of the audit committee, the compensation committee and the corporate governance and nominating committee. The Chief Executive Officer also has a written position description that has been approved by the Board and is reviewed annually.

## **Orientation and Continuing Education**

It is the mandate of the Corporate Governance and Nominating Committee to ensure that a process is established for the orientation and education of new directors that addresses the nature and operation of the Corporation's business and their responsibilities and duties as directors (including the contribution individual directors are expected to make and the commitment of time and resources that the Corporation expects from its directors).

The orientation includes an overview of the Corporation's history and operations, a review of industry conditions and competition, an introduction to the Corporation's management team and corporate and business information. Any further orientation is dependent on the needs of the new member and may include items such as formal training sessions and attendance at seminars.

With respect to the continuing education of directors, the Corporate Governance and Nominating Committee ensures that directors receive adequate information and continuing education opportunities on an ongoing basis to enable directors to maintain their skills and abilities as directors and to ensure their knowledge and understanding of the Corporation's business remains current.

## **Assessments**

It is the Board's mandate, in conjunction with the Corporate Governance and Nominating Committee, to assess the participation, contributions and effectiveness of the Chair and the individual members of the Board on an annual basis. The Board also monitors the effectiveness of the Board and its committees and the actions of the Board as viewed by the individual directors and senior management.

The Board has developed a formal questionnaire to be completed by each director on an annual basis for the purpose of formally assessing the effectiveness of the Board as a whole, committees of the Board, and the contribution of individual directors. These questionnaires, and the issues arising therefrom, are intended to be reviewed and assessed by the Lead Director on an annual basis or more frequently from time to time as the need arises. The Lead Director takes appropriate action as required based on the results obtained.

## Meeting Attendance

As stated in the Board Mandate, all directors are expected to attend each meeting in person, by phone or by video conference depending on the format of the meeting, to the extent practicable. The Board of Directors and its committees held nine meetings during 2019. More specifically, the Audit Committee met four times with all members in attendance. The Compensation Committee met three times during the full Board of Directors meetings, with all members in attendance. The Corporate Governance and Nominating Committee did not meet separately from the full Board of Directors during 2019 but governance matters were discussed and considered at the Board level. All of our directors attended at least 75 percent or more of the aggregate meetings of the Board of Directors and all committees on which they served during our fiscal 2019.

The following table illustrates the attendance record of each director for all Board meetings held for the year ended December 31, 2019.

Director	Meetings Attended
Carol G. Ashe	4 of 5
Denis Burger	5 of 5
Caroline M. Loewy	5 of 5
Erich Platzer	4 of 5
William G. Rice	5 of 5
Mark Vincent	5 of 5
Warren Whitehead	5 of 5

All directors and director nominees are expected to attend the annual meeting. Dr. Denis Burger, Dr. William Rice, Dr. Mark Vincent and Mr. Warren Whitehead attended last year's Annual Meeting of Shareholders.

## Executive Sessions

The independent directors meet regularly without the presence of non-independent directors and members of management. During the year ended December 31, 2019, independent directors met 5 times without the presence of management non-independent directors.

## Ethical Business Conduct

We have adopted a code of ethics for directors, officers (including our principal executive officer, principal financial officer and principal accounting officer) and employees, known as the Code of Business Conduct and Ethics. The Code of Business Conduct and Ethics is available on our website at <http://www.aptose.com> under the Corporate Governance section of our Investors page. We will promptly disclose on our website (i) the nature of any amendment to the policy that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions and (ii) the nature of any waiver, including an implicit waiver, from a provision of the policy that is granted to one of these specified individuals that is required to be disclosed pursuant to SEC rules and regulations, the name of such person who is granted the waiver and the date of the waiver.

The Corporate Governance and Nominating Committee regularly monitors compliance with the Code through communications with management and reports through the Disclosure and Insider Trading Policy (as described below) and ensures that management of the Corporation encourages and promotes a culture of ethical business conduct. A copy of the Code may be found by accessing the SEC's EDGAR filing database at [www.sec.gov](http://www.sec.gov), on SEDAR at [www.sedar.com](http://www.sedar.com) and on our website at [www.aptose.com](http://www.aptose.com).

The Corporation has developed a Disclosure and Insider Trading Policy that covers "whistle blowing" and provides an anonymous means for employees and officers to report violations of the Code or any other corporate policies, in addition to providing guidelines on employee trading in the Corporation's securities.

The Board has not granted any waiver of the Code in favor of a director or officer of the Corporation. No material change reports have been filed since the beginning of the Corporation's most recently completed fiscal year that pertain to any conduct of a director or executive officer that constitutes a departure from the Code.

#### **Conflicts of Interest**

The Corporate Governance and Nominating Committee monitors the disclosure of conflicts of interest by directors and ensures that no director will vote or participate in a discussion on a matter in respect of which such director has a material interest.

#### **Shareholder Communications with the Board**

Shareholders may communicate with the Board or any one particular director by sending correspondence, addressed to Mr. Gregory K. Chow, Aptose Executive Vice President, Chief Financial Officer and Corporate Secretary, 12770 High Bluff Drive, San Diego, California, 92130, with an instruction to forward the communication to the Board or one or more particular directors. He will forward promptly all such shareholder communications to the Board, or the one or more particular directors, after ascertaining whether the communications are appropriate to duties and responsibilities of the Board.

#### **Board Committees**

The Corporation has a standing Audit Committee, a Corporate Governance and Nominating Committee and a Compensation Committee, each of which are composed entirely of independent directors.

##### ***Audit Committee***

Membership. The current members of the Audit Committee are Caroline Loewy, Denis Burger and Warren Whitehead. Mr. Whitehead is the Chair of the Audit Committee. The Board has determined that all members of the Committee qualify as financial experts under the listing standards of Nasdaq.

In addition, each current member of the Audit Committee qualifies as "independent" for purposes of membership on audit committees under the listing standards of Nasdaq, the rules and regulations of the SEC and NI 52-110.

Meetings. The Audit Committee met four times during the period from January 1, 2019 until December 31, 2019.



Committee Mandate. Among its responsibilities, the Audit Committee:

- serves as an independent and objective party to monitor the integrity of our financial reporting process and systems of internal controls regarding finance, accounting, and legal compliance, including the review of our consolidated financial statements, MD&A and annual and interim results;
- identifies and monitors the management of the principal risks that could impact our financial reporting;
- monitors the independence and performance of our independent auditors, including the pre-approval of all audit fees and all permitted non-audit services in accordance with federal securities laws and the rules and regulations of the SEC;
- provides an avenue of communication among the independent auditors, management, and the Board; and
- encourages continuous improvement of, and foster adherence to, our policies, procedures and practices at all levels.

The Audit Committee is also responsible for implementing and overseeing our whistle-blowing procedures.

#### ***Corporate Governance and Nominating Committee***

Membership. The current members of the Corporate Governance and Nominating Committee are Mark Vincent, Carol Ashe and Caroline Loewy. Dr. Vincent is the Chair of the Committee. Each current member of the Committee qualifies as “independent” under the listing standards of Nasdaq, the rules and regulations of the SEC and NI 52-110.

Meetings. The Corporate Governance and Nominating Committee did not meet separately from the full Board of Directors during 2019 but governance matters were discussed and considered at the Board level.

Committee Mandate. Among its responsibilities, the Corporate Governance and Nominating Committee:

- identifies qualified individuals to become Board members, consistent with criteria approved by the Board;
- determines the composition of the Board and its committees;
- selects the director nominees for the next annual meeting of shareholders;
- monitors a process to assess Board, committee and management effectiveness;
- aids and monitors management succession planning; and

- develops, recommends to the Board, implements and monitors policies and processes related to the Corporation's corporate governance guidelines

### ***Compensation Committee***

Membership. The Compensation Committee is currently comprised of Board members Dr. Burger, Dr. Platzer and Ms. Ashe. Dr. Burger is the Chair of the Compensation Committee. Each current member of the Compensation Committee qualifies as "independent" for purposes of membership on compensation committees under the listing standards of Nasdaq, the rules and regulations of the SEC and NI 52-110, and as a "non-employee director" within the meaning of Rule 16b-3 under the Exchange Act.

Meetings. The Compensation Committee met three times during the period from January 1, 2019 until December 31, 2019 as part of full meetings of the Board of Directors.

Committee Mandate. Among its responsibilities, the Compensation Committee:

- reviews and makes recommendations to the Board regarding the corporate goals and objectives, performance and compensation of the Chief Executive Officer and other senior executive officers on an annual basis;
- evaluates the performance of the Chief Executive Officer and other senior executive officers;
- makes recommendations to the Board with respect to the compensation policies for the non-employee directors;
- makes recommendations regarding annual bonus policies for employees, the incentive-compensation plans and equity-based plans for the Corporation; and
- reviews executive compensation disclosure before the Corporation publicly discloses this information.

As part of its process to make recommendations to the Board with respect of the compensation for the non-employee directors and other employees of the Corporation, the Compensation Committee consults with the President and Chief Executive Officer and other officers of the Corporation as it deems necessary.

Further information pertaining the compensation of directors and officers and the role and policies of the Compensation Committee can be found in this Proxy Statement under the heading "Executive Compensation".

## PROPOSAL NO. 2—APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board, on the Audit Committee's advice, recommends the appointment of KPMG LLP, as the independent registered public accounting firm of the Corporation for the fiscal year ending December 31, 2020.

We are asking shareholders to approve the appointment of KPMG for the fiscal year ending December 31, 2020. If shareholders do not approve the appointment of KPMG LLP, the Audit Committee will reconsider its selection, but it retains sole responsibility for appointing and terminating our independent registered public accounting firm.

Representatives of KPMG LLP will be present at the Meeting to respond to appropriate questions. They will also have an opportunity to make a statement if they wish to do so.

### Board Recommendation

**The Board unanimously recommends a vote FOR the appointment of KPMG LLP as the independent registered public accounting firm of the Corporation for the fiscal year ended December 31, 2020.**

### Audit, Audit-Related, Tax and Other Fees

The tables below present fees for professional services rendered by KPMG LLP for the fiscal years ended December 31, 2018 and 2019, respectively.

	Aggregate Amount Billed <sup>(4)</sup>	
	2019	2018
Audit Fees <sup>(1)</sup>	\$ 151,675	\$ 163,930
Audit Related Fees <sup>(2)</sup>	208,442	127,347
Tax Fees <sup>(3)</sup>	53,099	20,985
<b>Total</b>	<b>\$ 413,216</b>	<b>\$ 312,262</b>

(1) Audit fees consisted of the audit of our annual financial statements for the fiscal years ended December 31, 2018 and 2019, respectively and interim reviews.

(2) Audit-related fees consist of the aggregate fees billed for assurance and related services that are reasonably related to the performance of the audit or review of the issuer's financial statements and are not reported under "Audit Fees" above and include the provision of comfort letters and consents and the review of documents filed with regulatory authorities.

(3) Tax fees include fees billed for assistance in the preparation of corporate tax returns and related filings and general tax advisory services

(4) All fees by KPMG are invoiced and paid in Canadian dollars. Fees for 2019 have been translated to US dollars at the Bank of Canada average annual exchange rate of 0.7536 and fees for 2018 have been translated to US dollars at the Bank of Canada average annual exchange rate of 0.7718.

## **Pre-Approval Policies and Procedures**

The Audit Committee has adopted procedures pursuant to which all audit, audit-related and tax services, and all permissible non-audit services provided by our independent registered public accounting firm must be pre-approved by the Audit Committee. All services rendered by KPMG LLP during our fiscal year 2019 were permissible under applicable laws and regulations and were all approved in advance by the Audit Committee in accordance with the rules adopted by the SEC in order to implement requirements of the Sarbanes-Oxley Act of 2002.

## **Audit Committee Report**

This report is furnished by the Audit Committee of the Board with respect to our financial statements for the year ended December 31, 2019.

One of the purposes of the Audit Committee is to oversee our accounting and financial reporting processes and the audit of our annual financial statements. Our management is responsible for the preparation and presentation of complete and accurate financial statements. Our independent registered public accounting firm, KPMG LLP, is responsible for performing an independent audit of our financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States) and for issuing a report on their audit.

In performing its oversight role, the Audit Committee has reviewed and discussed our audited financial statements for the year ended December 31, 2019 with our management. Management represented to the Audit Committee that our financial statements were prepared in accordance with generally accepted accounting principles. The Audit Committee has discussed with KPMG LLP, our independent registered public accounting firm, the matters required to be discussed by the applicable requirements of the Public Company Accounting Oversight Board and the Securities Exchange Commission. The Audit Committee has received the written disclosures and the letter from KPMG LLP required by the applicable requirements of the Public Company Accounting Oversight Board regarding communications with audit committees concerning independence. The Audit Committee has discussed with KPMG LLP its independence and concluded that the independent registered public accounting firm is independent from our company and our management.

Based on the review and discussions of the Audit Committee described above, the Audit Committee recommended to the Board that our audited financial statements for the year ended December 31, 2019 be included in our Annual Report on Form 10-K for the year ended December 31, 2019 for filing with the Securities and Exchange Commission.

*Audit Committee*  
Warren Whitehead, Chair  
Denis Burger  
Caroline Loewy

## EXECUTIVE COMPENSATION

### Information About Our Executive Officers

Aptose's leadership team comprises accomplished industry, financial and clinical research professionals who are dedicated to building a comprehensive anticancer drug pipeline and clinical development programs focused on targeted therapeutics directed against dysregulated oncogenic processes in patients with life. The team includes our Chairman and Chief Executive Officer, Dr. William G. Rice, whose biography is listed above; our Chief Financial Officer, Gregory K. Chow; our Chief Business Officer, Dr. Jotin Marango; and our Chief Medical Officer, Dr. Rafael Bejar.

*Gregory K. Chow*, age 47, joined Aptose as Senior Vice President and Chief Financial Officer in December 2013 and was appointed as Executive Vice President and Chief Financial Officer in 2019. Previously, Mr. Chow served as Managing Director, Director of Private Placements at Wedbush Securities from 2012 to 2013, where he led the private placement capital activities within the Life Sciences Investment Banking Group. Prior to joining Wedbush, he was a Director in the Private Placements / Equity Capital Markets Group at RBC Capital Markets from 2006 to 2011, where he led life science private capital activities. From 2003 to 2006, he led the Private Capital Group at Wells Fargo Securities and was a Senior Auditor at BDO Seidman, LLP in their Century City, CA office. Mr. Chow is a Certified Public Accountant (inactive) in the State of California. Mr. Chow received his MBA in Finance from The Wharton School at the University of Pennsylvania, and his BA in Business Economics with an emphasis in Accounting from the University of California, Santa Barbara.

*Dr. Jotin Marango*, age 41, joined Aptose as Senior Vice President and Chief Business Officer in June 2019. Prior to joining Aptose, from 2017 to 2019, Dr. Marango was a managing director and senior research analyst at Roth Capital Partners covering biotechnology and therapeutics. Dr. Marango joined Roth from H.C. Wainwright & Co., where he worked from 2015 to 2017 and covered hematology, oncology, and pulmonary therapeutics, with a focus on epigenetic and molecularly targeted therapies. Dr. Marango began his career in equity research with Collins Stewart/Canaccord Genuity in 2010. Previously, Dr. Marango also served as Chief Operating Officer at the Samuel Waxman Cancer Research Foundation from 2012 to 2015, where he oversaw academic collaborations in translational therapeutics, as well as venture philanthropy initiatives in drug development. Dr. Marango studied theoretical chemistry and classical literature at Harvard University and later received his M.D. and Ph.D. degrees from the Mount Sinai School of Medicine in New York.

*Dr. Rafael Bejar*, M.D, Ph.D., age 48, joined Aptose as Senior Vice President and Chief Medical Officer in January 2020. Dr. Bejar is an internationally recognized physician scientist with extensive research and clinical experience in the area of hematologic malignancies. Dr. Bejar joined Aptose from UC San Diego ("UCSD") where he began working in 2012. He continues to serve at UCSD as an Associate Professor of Clinical Medicine, caring for patients and maintaining a research laboratory focused on translational studies of myeloid malignancies and also serves and is an independent consultant as a member of the Independent Data Monitoring Committee for other pharmaceutical companies. At UCSD, he founded the MDS Center of Excellence and led the Hematology Disease Team from 2017 to 2019. There he has directed several clinical studies and served as an advisor for numerous companies including Celgene, Takeda, AbbVie, Astex, Genoptix, Forty Seven, PersImmune, and Daiichi-Sankyo. Outside UCSD, Dr. Bejar sits on the Scientific Advisory Board for the MDS Foundation, is a prior member of the National Comprehensive Cancer Network Guidelines Committee, and has led projects for the International Working Group for MDS. He is frequently invited to speak at national and international meetings and has published articles in a variety of journals including *The New England Journal of Medicine*, *Journal of Clinical Oncology*, *Leukemia*, *Blood*, and *Blood Advances*. Dr. Bejar has been board certified in Hematology and Oncology since completing his fellowship at the Dana-Farber Cancer Institute. He completed his internship in Internal Medicine at the University of Chicago followed by his residency at the Brigham and Women's Hospital in Boston where he later served a Medical Chief Resident and an Instructor in Hematology. He holds an MD degree and Neuroscience PhD from UCSD and a BS in Physics from MIT.

The following discussion covers the compensation arrangements for Mr. Rice, Mr. Chow and Mr. Marango (each, an “NEO” and, collectively the “Named Executive Officers”).

### ***Employment Agreements***

Aptose entered into an employment agreement with Dr. Rice on October 25, 2013 upon his commencement as Chairman, President, and Chief Executive Officer. This agreement was amended and restated on August 19, 2014. Pursuant to the amended and restated employment agreement, Dr. Rice is entitled to an annual base salary of \$480,000, which amount is reviewed annually by the Board and increased at the Board’s discretion, upon the advice of the Compensation Committee. Dr. Rice is also eligible for an annual discretionary bonus of up to 50% of his current base salary. The annual bonus is based on the Corporation’s and Dr. Rice’s achievement of objectives and milestones to be determined on an annual basis by the Board. Dr. Rice’s current agreement also provides for share option grants, which are governed by the terms of the Corporation’s Share Option Plan and the applicable share option agreement, Dr. Rice receives termination benefits described under “Termination and Change of Control Benefits,” below. Dr. Rice also receives employee benefits including, without limitation, participation in the Corporation’s 401(k) plan with a 3% nonelective company contribution, a monthly payment of \$2,000 until such time that the Corporation establishes a group health coverage plan (the Aptose group health coverage plan and life insurance plan for US employees was established in July 2014 at which time such monthly payments ceased), 25 days of paid vacation time annually, and an annual automobile allowance of \$18,000. Dr. Rice is subject to certain non-compete restrictions.

Aptose entered into an employment agreement with Mr. Chow upon his commencement as Chief Financial Officer, effective November 29, 2013. Pursuant to the employment agreement, Mr. Chow is entitled to an annual base salary of \$315,000, which amount is reviewed annually by the Board and increased at the Board’s discretion, upon the advice of the Compensation Committee. Mr. Chow is also eligible for an annual discretionary bonus of up to 40% of his current base salary. The annual bonus is based on the Corporation’s and Mr. Chow’s achievement of objectives and milestones to be determined on an annual basis by the Board. Mr. Chow’s agreement also provides for stock option grants which are governed by the terms of the Corporation’s Stock Option Plan and the applicable stock option agreement, and termination benefits described under “Termination and Change of Control Benefits,” below. Mr. Chow also receives employee benefits, including, without limitation, participation in any 401(k) plan with a 3% non-elective company contribution, participation in other benefits provided by Aptose to its U.S. based executive officers and other employees, which consist to date of life insurance and health benefits, and 20 days of paid vacation time annually and an annual automobile allowance of \$18,000. Mr. Chow is subject to certain non-compete restrictions.

Aptose entered into an employment agreement with Dr. Marango upon his commencement as Chief Business Officer, effective June 3, 2019. Pursuant to the employment agreement, Dr. Marango is entitled to an annual base salary of \$390,000 which amount is reviewed annually by the Board and increased at the Board’s discretion, upon the advice of the Compensation Committee. Dr. Marango is also eligible for an annual discretionary bonus of up to 40% of his current base salary. The annual bonus is based on the Corporation’s and Dr. Marango’s achievement of objectives and milestones to be determined on an annual basis by the Board. Dr. Marango’s agreement also provides for share option grants which are governed by the terms of the Corporation’s Stock Option Plan and the applicable share option agreement, and termination benefits described under “Termination and Change of Control Benefits,” below. Dr. Marango also receives employee benefits, including, without limitation, participation in any 401(k) plan with a 3% non-elective company contribution, participation in other benefits provided by Aptose to its U.S. based executive officers and other employees, which consist to date of life insurance and health benefits, and 20 days of paid vacation time annually. Dr. Marango’s is subject to certain non-compete restrictions.

Aptose entered into an employment agreement with Dr. Bejar upon his commencement as Chief Business Officer, effective January 1, 2020. Pursuant to the employment agreement, Dr. Bejar is entitled to an annual base salary of \$400,000 which amount is reviewed annually by the Board and increased at the Board's discretion, upon the advice of the Compensation Committee. Dr. Bejar is also eligible for an annual discretionary bonus of up to 40% of his current base salary. The annual bonus is based on the Corporation's and Dr. Bejar's achievement of objectives and milestones to be determined on an annual basis by the Board. Dr. Bejar's agreement also provides for share option grants which are governed by the terms of the Corporation's Share Option Plan and the applicable share option agreement, and termination benefits described under "Termination and Change of Control Benefits," below. Dr. Bejar also receives employee benefits, including, without limitation, participation in any 401(k) plan with a 3% non-elective company contribution, participation in other benefits provided by Aptose to its U.S. based executive officers and other employees, which consist to date of life insurance and health benefits, and 20 days of paid vacation time annually. Dr. Marango is subject to certain non-compete restrictions.

The Compensation Committee's mandate is to review and advise the Board on the recruitment, appointment, performance, compensation, benefits and termination of executive officers. The Compensation Committee also administers and reviews procedures and policies with respect to the share option plan (the "Share Option Plan"), the stock incentive plan (the "SIP"), employee benefit programs, pay equity and employment equity and reviews executive compensation disclosure where it is publicly disclosed.

Aptose's executive compensation program is designed to:

- attract and retain qualified, motivated and achievement-oriented individuals by offering compensation that is competitive in the industry and marketplace;
- align executive interests with the interests of Shareholders; and
- ensure that individuals continue to be compensated in accordance with their personal performance and responsibilities and their contribution to the overall objectives of the Corporation.

These objectives are achieved by offering executives and employees a compensation package that is competitive and rewards the achievement of both short-term and long-term objectives of the Corporation. As such, our compensation package consists of three key elements:

- base salary and initial share options;
- short-term compensation incentives to reward corporate and personal performance through potential annual cash bonuses; and
- long-term compensation incentives related to long-term increase in Share value through participation in the Share Option Plan and SIP.

The Compensation Committee reviews each of these items on a stand-alone basis and also reviews compensation as a total package. Adjustments to compensation are made as appropriate following a review of the compensation package as a whole.

### Independent Advice

In March 2018, the Compensation Committee retained Radford (an Aon Consulting Company), to provide independent advice to the Compensation Committee. Radford was retained to identify a peer group of companies as well as perform an assessment of the competitiveness of the Corporation's executive compensation process. Radford did not provide any services to management. The Compensation Committee has sole authority to retain and terminate any compensation consultant to be used to assist it in the evaluation of executive officer compensation. The Compensation Committee has sole authority to approve such consultants' fees and retention terms and to obtain advice and assistance from internal or external legal, accounting or other advisors.

The Committee conducted an independence assessment for Radford in accordance with the Committee's charter and Nasdaq listing standards, considering factors included in the listing standards. The Committee determined, based on an analysis of these factors, that the work of Radford as the independent compensation consultant did not create any conflict of interest.

### Comparator Group

In 2018, the Corporation, with advice from Radford, its independent compensation consultant, reviewed the compensation of its executive officers against that of its compensation peer group. The comparator group takes into account direct competitors for talent, especially for industry specific roles. The comparator group is comprised of 20 publicly traded U.S. biotechnology companies which range in size from approximately 1/3 × to 3× the market capitalization of the Corporation (as of October 2018). The companies comprising the comparator group are as follows:

Comparator Group Companies	
Actinium Pharmaceuticals, Inc.	Merrimack Pharmaceuticals, Inc.
AVEO Pharmaceuticals, Inc	Mersana Therapeutics, Inc.
Bellicum .	Miragen
Calithera Biosciences, Inc.	OncoMed Pharmaceuticals, Inc..
Catalyst Biosciences, Inc. .	Pieris Pharmaceuticals, Inc.
Conatus Pharmaceuticals, Inc. .	Proteostasis Therapeutics, Inc.
Corvus Pharmaceuticals, Inc.	Rexahn Pharmaceuticals, Inc.
Genoccea	Selecta Biosciences, Inc..
Immune Design	Sierra Oncology Inc.
Infinity Pharmaceuticals	Sunesis Pharmaceuticals, Inc.



### ***Pay Positioning***

The Corporation targets total cash compensation (salary and short-term incentive) somewhat above the 50<sup>th</sup> percentile of the comparator group, and generally provides long-term incentive opportunities in the 50<sup>th</sup> to 75<sup>th</sup> percentile of the comparator group. The Compensation Committee believes that this aligns executive compensation with the long-term interests of shareholders and with the Corporation's strategy. In 2018, Radford provided detailed information to the Compensation Committee relating to compensation values, pay mix and incentive vehicles at the comparator group companies. In addition, the Compensation Committee considered compensation in relation to executives located in Central and Southern California which are regions of relatively higher cost of living and highly competitive for recruitment and retention. Based on this information and also taking into account experience in the role, scope of the role, performance and retention risk, as further explained below, the Compensation Committee set compensation for the executives for 2018 aligned with the target pay positioning set out above.

Although the Compensation Committee considers Radford's recommendations in its review of executive compensation, the Compensation Committee ultimately makes its own decisions about compensation matters. The Compensation Committee realizes that using a peer benchmark such as the one provided by Radford is neither the only means for gathering and validating market data nor the only criteria for establishing executive compensation. In instances where an executive is uniquely critical to our success, the Compensation Committee may provide compensation in excess of the benchmark of the comparator group companies. Upward or downward variations for base salary and long-term incentives may also occur as a result of the individual's experience level, the balance of the individual's different elements of compensation, market factors and other strategic considerations. The Compensation Committee believes that, given the competitiveness of our industry and our company culture, our base compensation, cash incentives and equity programs are flexible, reward the achievement of clearly defined corporate goals and are generally sufficient to retain our existing executive officers and to hire new executive officers when necessary.

### ***Base Salary***

In establishing base salaries, the objective of the Compensation Committee is to establish levels that will enable Aptose to attract and retain executive officers that can effectively contribute to the long-term success of the Corporation. Base salary for each executive officer is determined by the individual's skills, abilities, experience, past performance and anticipated future contribution to the success of Aptose. The members of the Compensation Committee use their knowledge of the industry and of industry trends as well as independent third party consultants to assist with the determination of an appropriate compensation package for each executive officer.

### ***Short-Term Compensation Incentives***

Short-term compensation incentives motivate our executive officers to achieve specified performance objectives and to reward them for their achievement in the event that those objectives are met. Each year, the Compensation Committee approves the annual corporate objectives encompassing scientific, clinical, regulatory, business and corporate development and financial criteria. The annual cash incentive for the executive officers is based, at least in part, on the level of achievement of these annual objectives, assuming these objectives are still relevant at the time of evaluation.

All corporate and executive officer objectives and short-term incentives are reviewed by the Compensation Committee and approved by the Board.

For each executive officer, during the year ended December 31, 2019, the annual cash incentives ranged from 40% to 50% of base salary. In addition NEOs were awarded merit bonuses ranging from 15% to 22.5% of base salary.

Cash incentives are determined as soon as practicable after the end of the fiscal year and, for the Named Executive Officers (as defined hereinafter), are included in the Summary Compensation Table in the year in respect of which they are earned.

#### ***Short-Term Compensation Incentives - Performance Metrics***

The performance of the Named Executive Officers for the period ended December 31, 2019 was measured with respect to the following objectives:

- 1) Achievement of certain milestones for the development of the CG-806 program, including with regard to the preclinical development, as well as certain manufacture and non-clinical activities.
- 2) Achievement of certain milestones for the development of the APTO-253 program, including with regards to the Phase 1b trial in AML/MDS Patients, as well as other clinical and pre-clinical activities.
- 3) Metrics related to the improvement of the financial position, market recognition and analyst coverage of the Corporation.
- 4) Metrics related to corporate development and strategic activities, in connection with competitive positioning and partnering, intellectual property portfolio and human resources.

Each of the above objectives is weighted at 60%, 10%, 15% and 15%, respectively, in relation to assessment of satisfaction of overall corporate objectives and determination of any general corporate bonuses.

#### ***Long-Term Incentive Plans***

Long-term compensation incentives at Aptose reward an executive's contribution to the attainment of Aptose's long-term objectives, align an executive's performance with the long-term performance of Aptose and to provide an additional incentive for an executive to enhance shareholder value. Long-term incentive compensation for directors, officers, employees and consultants is reviewed annually and may be accomplished through the grant of share options under our Share Option Plan and of stock-based awards comprised of restricted stock units (the "Restricted Stock Units") and dividend equivalents (the "Dividend Equivalents") under our SIP.

In certain cases, executive officers may be granted share options on the commencement of employment with Aptose in accordance with the responsibility delegated to each executive officer for achieving corporate objectives and enhancing shareholder value in accordance with those objectives.

The number of options granted for certain executives of Aptose for the year ended December 31, 2019 was based on achievement of both corporate and executive officer objectives. The Compensation Committee approves the allocation of options, and options are priced using the closing market price of the Shares on the TSX on the last trading day prior to the grant. Options to purchase Shares expire ten years from the date of grant and vest over a term determined by the Compensation Committee, which is over four years for options granted during 2019. The Compensation Committee takes into account previous grants of options when considering new grants of options. Dr. Marango was granted 80,000 RSUs on June 3, 2019; 40,000 of the RSUs vested over a three-month period and the balance vested on the anniversary of the grant.

Stock and option awards may be subject to accelerated vesting in the event of termination or change of control, see “Termination and Change of Control Benefits.”

The options and RSUs granted to Named Executive Officers are included in the Summary Compensation Table in the year in which they are granted.

#### ***Other Benefits***

In certain cases, the Compensation Committee may recommend inclusion of automobile allowances, fitness allowances and the payment of certain professional dues as a component of a competitive remuneration package for executives.

#### ***Hedge or Offset Instruments***

Named Executive Officers, nor other Aptose employees, nor directors are permitted to purchase financial instruments that are designed to hedge or offset a decrease in market value of the Corporation’s equity securities granted as compensation or held, directly or indirectly, by Named Executive Officers or directors, including, for greater certainty, prepaid variable forward contracts, equity swaps, collars, or units of exchange funds.

#### **Summary Compensation Table**

The following table details the compensation information for the fiscal years ended December 31, 2018 and December 31, 2019 of the Corporation for the Named Executive Officers. All amounts presented in the following tables are as recorded in US dollars.

Name and Principal Position	Year	Salary (\$)	Stock awards <sup>(1)</sup> (\$)	Option awards <sup>(2)</sup> (\$)	Non-equity incentive plan compensation (\$)	All other compensation <sup>(3)</sup> (\$)	Total compensation (\$)
Dr. William G. Rice Chairman, President and Chief Executive Officer	2019	561,854	Nil	516,298	407,344	26,400	1,511,896
	2018	540,244	167,500	1,498,970	270,122	22,650	2,499,486
Mr. Gregory K. Chow Executive Vice President and Chief Financial Officer	2019	390,988	Nil	387,224	244,368	26,400	1,048,980
	2018	375,950	167,500	1,083,387	150,380	8,250	1,785,467
Dr. Jotin Marango Senior Vice President and Chief Business Officer	2019	217,500	160,000	426,057	124,002	900	928,459
	2018	-	-	-	-	-	-

(1) The dollar amounts in this column reflect the aggregate grant date fair value of all stock awards granted during the indicated fiscal year. These amounts have been calculated in accordance with ASC 718, excluding the effect of estimated forfeitures. Assumptions used in the calculation of these amounts are included in note 11 to our audited consolidated financial statements included in the Corporation's Annual Report on Form 10-K for the fiscal year ended December 31, 2019 (the "10-K"). These amounts do not necessarily correspond to the actual value recognized or that may be recognized by the NEOs. Dr. Marango was granted 80,000 RSUs on June 3, 2019; 40,000 of the RSUs vested over a three month period and the balance will vest on the anniversary of the grant. Stock awards are subject to the executives' continued employment with the Corporation. All stock awards issued to Dr. Rice, Mr. Chow and Dr. Marango may be subject to accelerated vesting following termination of employment. See "Termination and Change of Control Benefits" below.

(2) The dollar amounts in this column reflect the aggregate grant date fair value of all share option awards granted during the indicated fiscal year. These amounts have been calculated in accordance with ASC 718, using the Black-Scholes option-pricing model and excluding the effect of estimated forfeitures. Assumptions used in the calculation of these amounts are included in note 9 to our audited consolidated financial statements included in the Corporation's 10-K. These amounts do not necessarily correspond to the actual value recognized or that may be recognized by the NEOs.

During the year ended December 31, 2019 the following share options were granted to NEOs: 400,000 share options for Dr. Rice, 300,000 share options for Mr. Chow, and 320,000 share options for Dr. Marango. All options granted will vest over four years.

Share options are subject to the executives' continued employment with the Corporation and have a maximum term of 10 years. All share option grants issued to Dr. Rice and Mr. Chow may be subject to accelerated vesting following termination of employment. See "Termination and Change of Control Benefits" below

(3) The dollar amounts in this column reflect the Corporation's contributions to the executives' accounts in our 401(k) plan and car allowances. The contributions to our executives' accounts in our 401(k) plan were as follows: for 2018, \$8,250 for each of Dr. Rice and Mr. Chow, and for 2019: \$8,400 for each of Dr. Rice and Mr. Chow and \$900 for Dr. Marango. Car allowances were as follows: for 2019, \$18,000 to each of Dr. Rice and Mr. Chow.

(4) Dr. Marango joined Aptose on June 3, 2019.

**Outstanding Equity Awards at Fiscal Year-End**

Option-based Awards					Share-based awards	
Name and Principal Position	Number of securities underlying unexercised options (#) exercisable	Number of securities underlying unexercised options (#) unexercisable	Option exercise price (\$)	Option expiration date	Number shares or units of stock that have not vested (#)	Market value of shares or units of stock that have not vested (\$)
Dr. William G. Rice	35,417	Nil	2.68 <sup>(7)</sup>	Oct 27, 2023	Nil	N/A
Chairman,	65,136	Nil	5.63 <sup>(7)</sup>	Dec 10, 2023		
President and	5,281	Nil	5.36 <sup>(7)</sup>	Jan 29, 2024		
Chief Executive Officer	140,000	Nil	4.62 <sup>(7)</sup>	Apr 10, 2024		
	396,129	Nil	4.39 <sup>(7)</sup>	Jun 15, 2024		
	120,000	Nil	5.36 <sup>(7)</sup>	Jun 9, 2025		
	50,000	10,000 <sup>(1)</sup>	2.94 <sup>(7)</sup>	Mar 30, 2026		
	66,668	33,332 <sup>(2)</sup>	1.17 <sup>(7)</sup>	Mar 28, 2027		
	33,334	16,666 <sup>(3)</sup>	1.03	Jun 6, 2027		
	300,000	Nil	2.80	Jan 19, 2028		
	200,000	200,000 <sup>(4)</sup>	3.07	Jan 22, 2028		
	Nil	400,000 <sup>(5)</sup>	1.91	Jan 2, 2029		
Mr. Gregory K. Chow	35,417	Nil	7.21 <sup>(7)</sup>	Nov 4, 2023	Nil	N/A
Executive Vice	35,417	Nil	5.63 <sup>(7)</sup>	Dec 10, 2023		
President and	35,417	Nil	4.62 <sup>(7)</sup>	Apr 10, 2024		
Chief Financial Officer	22,083	Nil	4.39 <sup>(7)</sup>	Jun 15, 2024		
	64,167	Nil	4.06 <sup>(7)</sup>	Jul 18, 2024		
	60,000	Nil	5.36 <sup>(7)</sup>	Jun 9, 2025		
	50,000	10,000 <sup>(1)</sup>	2.94 <sup>(7)</sup>	Mar 30, 2026		
	66,668	33,332 <sup>(2)</sup>	1.17 <sup>(7)</sup>	Mar 28, 2027		
	33,334	16,666 <sup>(3)</sup>	1.03	Jun 6, 2027		
	150,000	Nil	2.80	Jan 19, 2028		
	175,000	175,000 <sup>(4)</sup>	3.07	Jan 22, 2028		
	Nil	300,000 <sup>(5)</sup>	1.91	Jan 2, 2029		
Dr. Jotin Marango	Nil	320,000 <sup>(6)</sup>	2.00	Jun 3, 2029	40,000 <sup>(8)</sup>	226,800
Senior Vice President and Chief Business Officer						

1. Unexercisable options vest on March 30, 2020.

2. Unexercisable options vest as follows: 50% vest on March 28, 2020 and 50% vest on March 28, 2021.

3. Unexercisable options vest as follows: 50% vest on June 6, 2020 and 50% vest on June 6, 2021.

4. Unexercisable options vest as follows: 33.33 % vest on January 22, 2020, 33.33% vest on January 22, 2021, and 33.33% vest on January 22, 2022.

5. Unexercisable options vest as follows: 50% vest on January 2, 2020, 16.67 % vest on January 2, 2021, 16.67% vest on January 22, 2022, and 16.67% vest on January 22, 2023.

6. Unexercisable options vest as follows: 50% vest on June 3, 2020, 16.67 % vest on June 3, 2021, 16.67% vest on June 3, 2022, and 16.67% vest on June 3, 2023.

7. Converted from the Canadian exercise price at the conversion rate of 0.7698 Canadian dollars per U.S. dollar.

8. RSUs were granted on June 3, 2019, 50% vested over three months and 50% will vest June 3, 2020. Market value is calculated by multiplying the number of RSUs outstanding by \$5.67, which was the closing price of Aptose shares on the Nasdaq Capital Market on December 31, 2019.

#### **Retirement Benefits**

The Corporation maintains a 401(k) plan in which eligible employees of the Corporation may choose to participate, including the Named Executive Officers. The Corporation makes non-elective contributions of 3% of compensation for all eligible employees, subject to the maximum allowed by the Internal Revenue Code Section 401(k).

#### **Termination and Change of Control Benefits**

The employment agreements of Dr. Rice, Mr. Chow and Dr. Marango provide that if their employment is terminated by the Corporation other than for “cause” (defined as (i) theft, fraud, dishonesty or material misconduct of the executive involving the property, business or affairs of the Corporation, which results, or could result in material harm to the Corporation, (ii) any material breach by the NEO of any term of his employment agreement, or (iii) any material breach of the Employee Information and Inventions Agreement (as defined in each employment agreement)), or if the Named Executive Officer resigns for “good reason” (defined as a material reduction in Executive Base Salary (as defined in each employment agreement), unless pursuant to a salary reduction program, a material reduction in the NEO’s duties or the relocation of the NEO’s principal place of employment) each of Dr. Rice, Mr. Chow and Dr. Marango shall be entitled to a payment equivalent to 12 months of their respective annual base salaries at the time of termination (Dr. Rice’s December 31, 2019 annual base salary represents \$561,854, Mr. Chow’s December 31, 2019 annual base salary represents \$390,988, and Dr. Marango’s base salary represents \$390,000), plus an amount equal to the average bonus remuneration received from the Corporation during the last three years of employment completed prior to the termination date, prorated based on the number of days the executive worked during the year of the termination. In addition, the employment agreements of Dr. Rice, Mr. Chow and Dr. Marango provide that certain payments related to health benefits will continue to be made for a period of 12 months following termination of their employment.

The employment agreements of Dr. Rice, Mr. Chow and Dr. Marango provide that, in the event their employment with the Corporation is terminated within three months immediately preceding or 12 months immediately following the consummation of a “change of control” (defined as the consummation of any of the following: (a) the acquisition of the Corporation by another entity by means of any transaction or series of related transactions to which the Corporation is a party, (b) a sale, lease or other conveyance of all or substantially all of the assets of the Corporation, or (c) an liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary), each of Dr. Rice, Mr. Chow and Dr. Marango would be eligible, subject to certain conditions, to receive a payment equivalent to 18 months of their annual base salaries at the time of termination, plus an amount equal to 150% of the average bonus remuneration received from the Corporation during the last three years of employment completed prior to the termination date, prorated based on the number of days the executive worked during the year of the termination, as well as continuation of the payments related to health benefits for a period of 12 months following the termination following a change of control.

The employment agreements of Dr. Rice, Mr. Chow and Dr. Marango provide that in the event of their termination, other than for cause, the vesting and exercisability of all then outstanding unvested share options, RSUs or other equity awards then held by such NEO become immediately vested and exercisable and shall remain exercisable as set forth in the applicable award documents.

## DIRECTOR COMPENSATION

### Overview

The Compensation Committee makes recommendations regarding compensation payable to our non-employee directors to the entire Board of Directors, which then makes final decisions regarding such compensation.

### Cash Compensation

Non-employee directors are entitled to an annual fee of \$60,000 with no per meeting fees. The Lead Director is entitled to an additional annual fee of \$40,000. The chair of each committee is entitled to an additional annual fee of \$15,000, with the exception of the chair of the Audit Committee who is entitled to an additional annual fee of \$20,000. Each committee member is entitled to receiving an annual fee of \$10,000 per committee. All fees are paid in quarterly installments.

Non-employee directors are reimbursed for any out-of-pocket travel expenses incurred in order to attend meetings. Executive directors are not entitled to directors' compensation.

### Option Awards

Upon appointment to the Board a non-employee director will be entitled to an option grant of 25,000 options under the Share Option Plan and each year thereafter are eligible for an additional grants at the beginning of the fiscal year. The options vest 50% after one year, and 25% for each of the second and third years. If a director resigns, the director will have 90-days to exercise all vested and unexercised options from the date resignation.

The following table details the compensation received by each non-employee director for the year ended December 31, 2019:

Name	Fees earned or paid in cash (\$)	Option awards <sup>(1)(2)</sup> (\$)	Total (\$)
Carol G. Ashe	56,000	51,630	107,630
Caroline M. Loewy	56,000	51,630	107,630
Dr. Denis Burger	85,000	51,630	136,630
Dr. Mark Vincent	52,000	51,630	103,630
Mr. Warren Whitehead	55,000	51,630	106,630
Dr. Erich Platzer	48,000	51,630	99,630

- (1) The dollar amounts in this column reflect the aggregate grant date fair value of all share option awards granted during the indicated fiscal year. These amounts have been calculated in accordance with ASC 718, using the Black-Scholes option-pricing model and excluding the effect of estimated forfeitures. Assumptions used in the calculation of these amounts are included in note 11 to our audited consolidated financial statements included in the Corporation's 10-K. These amounts do not necessarily correspond to the actual value recognized or that may be recognized by the non-employee directors.

- (2) The aggregate number of shares subject to outstanding share options held by each of the non-employee directors listed in the table above as of December 31, 2019 was as follows: 65,000 for Ms. Ashe, 65,000 for Ms. Loewy, 160,334 for Dr. Burger, 154,083 for Dr. Vincent, 152,500 for Mr. Whitehead and 135,000 for Dr. Platzler.

## EQUITY COMPENSATION PLAN INFORMATION

### General

As of December 31, 2019, the total number of Shares subject to outstanding awards and available for issuance by the Corporation under the Share Option Plan and the SIP was 13,318,905. The maximum number of Shares reserved for issuance collectively under the Share Option Plan and any other security based compensation arrangement may not exceed 17.5% of the Corporation's issued and outstanding Shares as of December 31, 2019. As of December 31, 2019, there were outstanding options to purchase 5,940,420 Shares issued under the Share Option Plan, representing 7.8% of the issued and outstanding Shares of the Corporation and 40,000 Restricted Stock Units issued and outstanding under the SIP, representing 0.1% of the issued and outstanding Shares of the Corporation. Therefore, 7,338,485 Shares remain available for future issuance under the Share Option Plan and the SIP, representing 9.6% of the issued and outstanding Shares of the Corporation.

### Share Option Plan

The Share Option Plan was established to advance the interests of Aptose by:

- providing Eligible Persons (as defined below) with additional incentives;
- encouraging stock ownership by Eligible Persons;
- increasing the interest of Eligible Persons in the success of Aptose;
- encouraging Eligible Persons to remain loyal to Aptose; and
- attracting new Eligible Persons to Aptose.

The Compensation Committee, as authorized by the Board, administers the Share Option Plan. The maximum total number of Shares available for issuance from treasury under the Share Option Plan, together with the SIP and any other security based compensation arrangement, is 17.5% of the Corporation's issued and outstanding Shares at any given time. Any exercise of options pursuant to the Share Option Plan will make new option grants available under the Share Option Plan, provided that the maximum number of Shares reserved for issuance collectively under the Share Option Plan and the SIP may not exceed 17.5% of the Corporation's issued and outstanding Shares at any given time.

Under the Share Option Plan, options may be granted to any executive officer, employee, subsidiary of an executive officer or employee, or consultant or consultant entity ("Eligible Persons"). The exercise price of options granted under the Share Option Plan is established by the Board and will be equal to the closing market price of the Shares on the TSX on the last trading day preceding the date of grant. If there is no trading on that date, the exercise price will be the average of the bid and ask on the TSX on the last trading date preceding the date of grant. If not otherwise determined by the Board, an option granted under the Share Option Plan will vest as to 50% on the first anniversary of the date of grant of the option and an additional 25% on the second and third anniversaries after the date of grant. The Board fixes the term of each option when granted, but such term may not be greater than 10 years from the date of grant. If the date on which an option expires pursuant to an option agreement occurs during, or within 10 days after the last day of, a black out period or other restriction period imposed on the trading of Shares by the Corporation, the expiry date for the option will be the last day of the 10-day period. Options are personal to the participant and a participant may not transfer an option except in accordance with the Share Option Plan.



The Share Option Plan does not limit insider participation and does not provide a maximum number of Shares which may be issued to an individual under the Share Option Plan. The Corporation did not provide financial assistance to any Eligible Person to facilitate the exercise of Options during the year ended December 31, 2019.

The Board may, in its sole discretion, amend, suspend or terminate the Share Option Plan or any portion of it at any time in accordance with applicable legislation, without obtaining the approval of Shareholders. Such amendments could include: (i) amendments of a “housekeeping” nature; (ii) a change to the vesting provisions of options granted pursuant to the Share Option Plan; and (iii) a change to the termination provisions of options granted under the Share Option Plan which does not entail an extension beyond the original expiry date.

Any amendment to any provision of the Share Option Plan is subject to any required regulatory or Shareholder approval. The Corporation is, however, required to obtain the approval of the Shareholders for any amendment related to (i) the maximum number of Shares reserved for issuance under the Share Option Plan, and under any other security based compensation arrangements of the Corporation; (ii) a reduction in the exercise price for options held by insiders of the Corporation; and (iii) an extension to the term of options held by insiders of the Corporation.

If an option holder is terminated without cause, resigns or retires, each option that has vested will cease to be exercisable three months after the option holder’s termination date. Any portion of an option that has not vested on or prior to the termination date will expire immediately. If an option holder is terminated for cause, each option that has vested will cease to be exercisable immediately upon the Corporation’s notice of termination. Any portion of an option that has not vested on or prior to the termination date will expire immediately.

#### **Stock Incentive Plan**

The Corporation adopted the SIP following shareholder approval on June 10, 2015. Pursuant to the SIP, the Board may grant stock-based awards comprised of Restricted Stock Units or Dividend Equivalents (collectively, the “Awards”) to employees, officers, consultants, independent contractors, advisors and non-employee directors of the Corporation or any affiliate (the “SIP Participants”).

The maximum total number of shares available for issuance under the SIP and any other security based compensation arrangement of the Corporation (including the Share Option Plan) is 17.5% of the number of issued and outstanding Shares. Any issuance of Shares covered by an Award or to which an Award relates will make new grants available under the SIP. Since the adoption of the SIP, no Awards have been granted.

Under the SIP, Restricted Stock Units are subject to such restrictions as the Board may impose (including, without limitation, any limitation on the right to receive any dividend or other right or property with respect thereto), which restrictions may lapse separately or in combination at such time or times, in such installments or otherwise as the Board may deem appropriate; provided, however, that the Restricted Stock Units may not vest until at least 3 months after the date of grant.

Under the SIP, the Board may also grant Dividend Equivalents to SIP Participants under which the Participant shall be entitled to receive payments (in cash, Shares, other securities, other Awards or other property as determined in the discretion of a committee or subcommittee of the Board appointed from time to time by the Board to administer the SIP) equivalent to the amount of cash dividends paid by the Corporation to holders of Shares with respect to a number of shares determined by the Board.

The SIP does not limit insider participation and does not provide a maximum number of Shares which may be issued to an individual under the SIP. However, no director of the Corporation who is not also an employee of the Corporation or an affiliate may be granted any Awards that exceed in the aggregate \$150,000 (such value computed as of the date of grant in accordance with applicable financial accounting principles) in any calendar year.

Subject to the express provisions of the SIP and to applicable law, the Board shall have full power and authority to: (i) designate SIP Participants; (ii) determine the type of Awards to be granted to each SIP Participant under the SIP and the number of Shares to be covered by each Award; (iii) determine the terms and conditions of any Award or Award Agreement, including any terms relating to the forfeiture of any Award and the forfeiture, recapture or disgorgement of any cash, Shares or other amounts payable with respect to any Award; (iv) amend the terms and conditions of any Award or Award Agreement, subject to the limitations under Section 7 of the SIP; and (v) accelerate the exercisability of any Award or the lapse of any restrictions relating to any Award, subject to the limitations in Section 7 of the SIP.

Except as otherwise determined under the SIP, no Award and no right under such Award shall be transferable by a SIP Participant other than by will or by the laws of descent and distribution, and no Award or right under any such Award may be pledged, alienated, attached or otherwise encumbered.

The Board may from time to time amend, suspend or terminate the SIP, and the Board may amend or alter any previously granted Award, as applicable, without obtaining the approval of Shareholders in order to: (i) correct any defect, supply any omission or reconcile any inconsistency in the SIP or in any Award or award agreement in the manner and to the extent it shall deem desirable to implement or maintain the effectiveness of the SIP; (ii) amend the eligibility for, and limitations or conditions imposed upon, participation in the SIP; (iii) make changes that are necessary or desirable to comply with applicable laws, rules, regulations and policies of any applicable governmental entity or stock exchange; (iv) amend any terms relating to the administration of the SIP, including the terms of any administrative guidelines or other rules related to the SIP; or (v) make any other amendment, whether fundamental or otherwise, not requiring Shareholders' approval under TSX Company Manual, the rules or regulations of the United States SEC or any other securities exchange that are applicable to the Corporation.

Prior approval of the Shareholders shall be required for any amendment to the Plan or an Award that would: (i) require shareholder approval under the TSX Company Manual, the rules or regulations of the SEC or any other securities exchange that are applicable to the Corporation; (ii) increase the maximum number of shares authorized under the SIP; (iii) increase the annual limit on Awards granted to non-employee directors; or (iv) amend the amendment provision of the SIP.

Except as otherwise determined under the SIP, upon a SIP Participant's termination of employment or resignation or removal as a Director during the applicable restriction period, all Restricted Stock Units held by such SIP Participant at such time shall be cancelled by the Corporation; provided, however, that the committee or subcommittee of the Board appointed by the Board from time to time to administer the SIP may waive in whole or in part any or all remaining restrictions with respect to Restricted Stock Units.

## Employee Share Purchase Plan

We have an Employee Share Purchase Plan (“ESPP”), the purpose of which is to assist the Corporation in retaining the services of its employees, to secure and retain the services of new employees and to provide incentives for such persons to exert maximum efforts for the success of the Corporation. The ESPP provides a means by which employees of the Corporation and its affiliates may purchase Shares on the stock market at a 15% discount through accumulated payroll deductions. Eligible participants in the ESPP include all employees, including executive officers, who work at least 20 hours per week and are customarily employed by the Corporation or an affiliate of the Corporation for at least six months per calendar year. Generally, each offering is of three months’ duration with purchases occurring every quarter. Participants may authorize payroll deductions of up to 15% of their base compensation for the purchase of Shares under the ESPP.

During the year ended December 31, 2019, under the ESPP, Named Executive Officers, as a group, and employees did not purchase any Shares pursuant to the ESPP. Since December 31, 2019, there have been no Shares purchased pursuant to the ESPP.

## Equity Compensation Plan Information

The following table sets forth certain details as at the end of the year ended December 31, 2019 with respect to compensation plans pursuant to which equity securities of the Corporation are authorized for issuance.

Plan Category	Number of Shares to be issued upon exercise of outstanding options <sup>(1)</sup> (a)	Weighted- average exercise price of outstanding options (b)	Number of Shares to be issued upon vesting of RSUs (c)	Number of Shares remaining available for future issuance under the equity compensation plans (Excluding Shares reflected in Columns (a) or (c)) <sup>(2)</sup> (c)
Equity compensation plans approved by security holders	5,940,420	\$ 2.84	40,000	7,338,485
Equity compensation plans not approved by security holders	-	-	-	-
Total	5,940,420	\$ 2.84	40,000	7,338,485

1. Includes share options exercisable for 3,056,586 shares granted under the Share Option Plan and SIP.

2. Includes share option awards, RSUs, and Dividend Equivalents that may be awarded under our Share Option Plan and SIP as at December 31, 2019. There are no shares subject to outstanding rights to purchase or shares remaining issuable under our Employee Stock Purchase Plan as at December 31, 2019.

### Securities issuable under equity compensation plans as a percentage of outstanding Shares

The following table provides information on the securities issuable collectively under the Share Option Plan and SIP, expressed as a number and as a percentage of the Shares as of December 31, 2019:

Equity Compensation Plan		Maximum number of securities issuable under the plans <sup>(1)</sup>	Total number of securities awarded and outstanding under the plans	Total number of securities available for grant under the plans
Share Option Plan and SIP	Number	13,318,905	5,980,420	7,338,485
	Percentage of outstanding Shares <sup>(2)</sup>	17.5%	7.9%	9.6%

(1) The maximum total number of shares available for issuance under all the security based compensation arrangements of the Corporation is 17.5%. Accordingly, the number of securities issuable, outstanding and available under the Share Option Plan and the SIP are represented together.

(2) As of December 31, 2019, there were 76,108,031 Shares issued and outstanding.

### Annual Burn Rate

The following table provides the annual burn rate associated with the Share Option Plan and the SIP for each of the Corporation's three most recent fiscal years:

Equity Compensation Plan	Fiscal year	Number of securities granted under the plan <sup>(1)</sup>	Weighted average number of securities outstanding <sup>(2)</sup>	Annual burn rate <sup>(3)</sup>
Share Option Plan	2019	2,160,050	50,158,936	4.31%
	2018	2,319,500	33,391,815	6.95%
	2017	826,500	22,313,364	3.70%
SIP	2019	80,000	50,158,936	0.16%
	2018	150,000	33,391,815	0.45%
	2017	150,000	22,313,364	0.67%

(1) Corresponds to the number of securities granted under the plan in the applicable fiscal year.

(2) The weighted average number of securities outstanding during the period corresponds to the number of securities outstanding at the beginning of the period, adjusted by the number of securities repurchased or issued during the period, and multiplied by a time-weighting factor.

(3) The annual burn rate percent corresponds to the number of securities granted under the plan divided by the weighted average number of securities outstanding.

#### **INTEREST OF CERTAIN PERSONS IN MATTERS TO BE ACTED UPON**

None of the directors or executive officers of the Corporation, none of the persons who have been directors or executive officers of the Corporation at any time since January 1, 2019, none of the proposed nominees for election as a director of the Corporation and none of the associates or affiliates of any of the foregoing has any material interest, direct or indirect, by way of beneficial ownership of securities or otherwise, in any matter scheduled to be acted upon at the Meeting other than the election of directors.

#### **INTEREST OF RELATED PERSONS IN TRANSACTIONS**

For the last two completed fiscal years, no director, proposed director, executive officer, or immediate family member of a director, proposed director or executive officer nor, to the knowledge of our directors or executive officers, after having made reasonable inquiry, any person or company who beneficially owns, directly or indirectly, Shares carrying more than 5% of the voting rights attached to all Shares outstanding at the date hereof, or any immediate family member thereof, had any material interest, direct or indirect, in any transaction or proposed transaction of the Corporation which involves an amount exceeding the lesser of \$120,000 or one percent of the average of the Corporation's total assets at year-end for the last two completed fiscal years.

## **HOUSEHOLDING OF ANNUAL PROXY MATERIALS**

Some banks, brokers and other nominee record holders may be participating in the practice of “householding” proxy statements and annual reports. This means that only one copy of our Notice of Internet Availability of Proxy Materials, proxy materials or annual report to Shareholders may have been sent to multiple Shareholders in each household unless otherwise instructed by such Shareholders. We will deliver promptly a separate copy of these documents to any Shareholder upon written or oral request to our Chief Financial Officer at Aptose Biosciences Inc., Suite 120, 12770 High Bluff Drive, San Diego, California, telephone: 858-926-2730. Any Shareholder who wants to receive separate copies of our Notice of Internet Availability of Proxy Materials, proxy materials or annual report to Shareholders in the future, or any Shareholders who is receiving multiple copies and would like to receive only one copy per household, should contact the Shareholder’s bank, broker, or other nominee record holder, or the Shareholder may contact us at the above address and phone number.

## **INDEBTEDNESS**

As of the date hereof, there is no indebtedness owing to the Corporation by any employees, officers or directors of the Corporation. The Corporation did not provide financial assistance to any employees, officers or directors for the purchase of securities during the year ended December 31, 2019 or from January 1, 2020 to the date hereof.

## **DIRECTORS AND OFFICERS’ LIABILITY**

We purchase and maintain liability insurance for the benefit of directors and officers to cover any liability incurred by such person in such capacities. The policy provides for coverage in the amount of \$30,000,000. The annual premium payable by the Corporation for directors’ and officers’ liability insurance for the year ended December 31, 2019 was \$668,000.

## **MANAGEMENT CONTRACTS**

The management functions of the Corporation are not, in any way, performed in a substantial degree by a person or persons other than the directors or the executive officers of the Corporation.

## **ADDITIONAL INFORMATION**

Additional information relating to us, including our most current Annual Report on Form 10-K (together with documents incorporated therein by reference), our consolidated financial statements for the year ended December 31, 2019, the report of the independent registered public accounting firm thereon, and management’s discussion and analysis of our financial condition and results of operations for the year ended December 31, 2019 can be found by accessing the SEC’s EDGAR filing database at [www.sec.gov](http://www.sec.gov) and on SEDAR at [www.sedar.com](http://www.sedar.com). Copies of those documents are available upon written request to the Chief Financial Officer and Secretary at Aptose Biosciences Inc., Suite 120, 12770 High Bluff Drive, San Diego, California, free of charge to our securityholders. Our financial information is provided in our consolidated financial statements for the year ended December 31, 2019 and management’s discussion and analysis of our financial condition and results of operations for the year ended December 31, 2019.

**DIRECTORS' APPROVAL**

The contents and sending of this Proxy Statement have been approved by our directors.

(signed) William G. Rice, Ph.D.  
Chairman, President and Chief Executive Officer  
April 24, 2020

## APPENDIX A

### APTOSE BIOSCIENCES INC. BOARD MANDATE

#### Purpose

The board of directors (the “Board”) of Aptose Biosciences Inc. (the “Corporation”) is responsible for the proper stewardship of the Corporation. The Board is mandated to represent the shareholders to select the appropriate Chief Executive Officer (“CEO”), assess and approve the strategic direction of the Corporation, ensure that appropriate processes for risk assessment, management and internal control are in place, monitor management performance against agreed bench marks, and assure the integrity of financial reports.

#### Membership and Reporting

1. A majority of the directors of the Board will be “independent” as defined by National Instrument 58-101— *Disclosure of Corporate Governance Practices* (“NI 58-101”), U.S. securities laws and applicable stock exchange rules. The Board will have no more than the maximum set out in the Corporation’s articles and by-laws, which maximum number the Board will reassess from time to time having consideration for the particular needs of the Corporation.
2. Appointments to the Board will be reviewed on an annual basis. The Corporate Governance and Nominating Committee, in consultation with the CEO, is responsible for identifying and recommending new nominees with appropriate skills to the Board.
3. The Board will report to the shareholders of the Corporation.

#### Terms of Reference

##### Meetings

1. The Board will meet as required, but at least once quarterly.
2. The independent directors will meet as required, without the non-independent directors and members of management, but at least once quarterly.

##### Meeting Preparation and Attendance

3. In connection with each meeting of the Board and each meeting of a committee of the Board of which a director is a member, each director will:
  - (a) review thoroughly the materials provided to the directors in connection with the meeting and be adequately prepared for the meeting; and
  - (b) attend each meeting in person, by phone or by video-conference depending on the format of the meeting, to the extent practicable.



#### Corporate Planning and Performance

4. The Board will:
- (a) adopt a strategic planning process and approve a strategic plan each year; and
  - (b) approve and monitor the operational plans and budgets of the Corporation submitted by management at the beginning of each fiscal year.

In establishing corporate performance objectives, the Board will:

- (a) ensure that it has adequate opportunity and information available to it to gain knowledge of the business and the industry sufficient to make fully informed decisions and to adopt meaningful and realistic long-term and short-term strategic objectives for the Corporation. This may include the opportunity for the Board to meet from time to time with industry, medical and scientific experts in related fields of interest;
  - (b) ensure that effective policies and processes are in place relating to the proper conduct of the business, the effective management of risk and the values to be adopted by the Corporation; and
  - (c) ensure that appropriate and effective environmental and occupational health and safety policies are in place, are operational and are supported by adequate resources.
5. The Board will:
- (a) ensure the integrity of the Corporation's financial reporting and internal control and disclosure policies and processes;
  - (b) review the Corporation's quarterly and year-end audited financial statements;
  - (c) review annual audit plans and findings and monitor the implementation of audit recommendations;
  - (d) ensure that the Board has available to it any independent external advice that may be required from time to time; and
  - (e) implement, or delegate the implementation of measures for receiving feedback from stakeholders.

#### Risk Management and Ethics

6. The Board will:
- (a) ensure that the business of the Corporation is conducted in compliance with applicable laws and regulations and according to the highest ethical standards;
  - (b) identify and document the financial risks and other risks that the Corporation faces in the course of its business and ensure that such risks are appropriately managed; and
  - (c) adopt a disclosure policy.

#### Shareholder Communication

7. The Board will ensure that effective communication and disclosure policies are in place between the Board and the Corporation's shareholders, other stakeholders and the public. The Board will determine, from time to time, the appropriate criteria against which to evaluate performance against shareholder expectations and will set corporate strategic goals and objectives within this context. The Board will regularly review its criteria for the evaluation of shareholder expectations to ensure that they remain relevant to changing circumstances.

#### Supervision of Management

8. The Board will:
- (a) to the extent feasible, satisfy itself as to the integrity of the CEO and other executive officers and that all such officers are creating a culture of integrity throughout the Corporation;
  - (b) ensure that the CEO is appropriately managing the business of the Corporation;
  - (c) ensure appropriate succession planning is in place (including appointing, training and monitoring senior management), in particular with respect to the CEO position;
  - (d) establish corporate objectives for the CEO annually and evaluate the performance of the CEO against these corporate objectives;
  - (e) consider and approve major business initiatives and corporate transactions proposed by management; and
  - (f) ensure the Corporation has internal control and management information systems in place.

#### Management of Board Affairs

9. The Board will:
- (a) ensure that an appropriate governance structure is in place, including a proper delineation of roles and clear authority and accountability among the Board, Board committees, the CEO and the Chief Financial Officer (or its functional equivalent);
  - (b) develop a process for the orientation and education of new members of the Board;
  - (c) support continuing education opportunities for all members of the Board;
  - (d) in conjunction with the Corporate Governance and Nominating Committee, assess the participation, contributions and effectiveness of the Chair of the Board, and individual Board members on an annual basis;
  - (e) monitor the effectiveness of the Board and its committees and the actions of the Board as viewed by the individual directors and senior management;
  - (f) ensure that Board meetings operate effectively, agendas are focused on the governance role of the Board, and that the Board is able to function independently of management when required;
  - (g) ensure that effective governance policies are in place regarding the conduct of individual directors and employees, including but not limited to, policies relating to insider trading and confidentiality and conflict of interest;
  - (h) establish the committees of the Board it deems necessary or as required by applicable law to assist it in the fulfillment of its mandate; and
  - (i) disclose on an annual basis the mandate, composition of the Board and its committees.

Security Class

Holder Account Number

Fold

## Form of Proxy - Annual General Meeting to be held on June 2, 2020

### This Form of Proxy is solicited by and on behalf of Management.

#### Notes to proxy

1. Every holder has the right to appoint some other person or company of their choice, who need not be a holder, to attend and act on their behalf at the meeting or any adjournment or postponement thereof. If you wish to appoint a person or company other than the persons whose names are printed herein, please insert the name of your chosen proxyholder in the space provided (see reverse).
2. If the securities are registered in the name of more than one owner (for example, joint ownership, trustees, executors, etc.), then all those registered should sign this proxy. If you are voting on behalf of a corporation or another individual you must sign this proxy with signing capacity stated, and you may be required to provide documentation evidencing your power to sign this proxy.
3. This proxy should be signed in the exact manner as the name(s) appear(s) on the proxy.
4. If this proxy is not dated, it will be deemed to bear the date on which it is mailed by Management to the holder.
5. The securities represented by this proxy will be voted as directed by the holder, however, if such a direction is not made in respect of any matter, this proxy will be voted as recommended by Management.
6. The securities represented by this proxy will be voted in favour or withheld from voting or voted against each of the matters described herein, as applicable, in accordance with the instructions of the holder, on any ballot that may be called for and, if the holder has specified a choice with respect to any matter to be acted on, the securities will be voted accordingly.
7. This proxy confers discretionary authority in respect of amendments or variations to matters identified in the Notice of Meeting or other matters that may properly come before the meeting or any adjournment or postponement thereof.
8. This proxy should be read in conjunction with the accompanying documentation provided by Management.

Fold

Proxies submitted must be received by 5:00 pm, Eastern Daylight Time, on May 29, 2020.

### VOTE USING THE TELEPHONE OR INTERNET 24 HOURS A DAY 7 DAYS A WEEK!



#### To Vote Using the Telephone

- Call the number listed BELOW from a touch tone telephone.
- 1-866-732-VOTE (8683) Toll Free**



#### To Vote Using the Internet

- Go to the following web site: [www.investorvote.com](http://www.investorvote.com)
- Smartphone? Scan the QR code to vote now.



#### To Receive Documents Electronically

- You can enroll to receive future securityholder communications electronically by visiting [www.investorcentre.com](http://www.investorcentre.com) and clicking at the bottom of the page.



#### To Virtually Attend the Meeting

- You can attend the meeting virtually by visiting the URL provided on the back of this proxy.

If you vote by telephone or the Internet, DO NOT mail back this proxy.

Voting by mail may be the only method for securities held in the name of a corporation or securities being voted on behalf of another individual.

Voting by mail or by Internet are the only methods by which a holder may appoint a person as proxyholder other than the Management nominees named on the reverse of this proxy. Instead of mailing this proxy, you may choose one of the two voting methods outlined above to vote this proxy.

To vote by telephone or the Internet, you will need to provide your CONTROL NUMBER listed below.

#### CONTROL NUMBER

01LDRA



### Appointment of Proxyholder

I/We, being holder(s) of Aptose Biosciences Inc. hereby appoint:  
William G. Rice or, failing this person, Gregory K. Chow

OR

Print the name of the person you are  
appointing if this person is someone  
other than the Management Nominees  
listed herein.

Note: If completing the appointment box above YOU MUST go to  
<http://www.computershare.com/aptose> and provide Computershare with the name and email  
address of the person you are appointing. Computershare will use this information ONLY to  
provide the appointee with a user name to gain entry to the online meeting.

as my/our proxyholder with full power of substitution and to attend, act and to vote for and on behalf of the shareholder in accordance with the following direction (or if no directions have been given, as the proxyholder sees fit) and all other matters that may properly come before the Annual General Meeting of shareholders of Aptose Biosciences Inc. (the "Corporation") to be held online at <https://web.lumiagm.com/192484056>, on June 2, 2020 at 10:00 am, Pacific Daylight Time, and at any adjournment or postponement thereof.

VOTING RECOMMENDATIONS ARE INDICATED BY **HIGHLIGHTED TEXT** OVER THE BOXES.

### 1. Election of Directors

	For	Withhold		For	Withhold		For	Withhold
01. Carol Ashe	<input type="checkbox"/>	<input type="checkbox"/>	02. Dr. Denis Burger	<input type="checkbox"/>	<input type="checkbox"/>	03. Caroline Loewy	<input type="checkbox"/>	<input type="checkbox"/>
04. Dr. Eric Platzer	<input type="checkbox"/>	<input type="checkbox"/>	05. Dr. William G. Rice	<input type="checkbox"/>	<input type="checkbox"/>	06. Dr. Mark D. Vincent	<input type="checkbox"/>	<input type="checkbox"/>
07. Warren Whitehead	<input type="checkbox"/>	<input type="checkbox"/>						

Fold

For Against Abstain

### 2. Appointment of Auditor

Appointment of KPMG, LLP as the independent accounting firm for the Corporation.

☐☐☐

Fold

### Authorized Signature(s) – This section must be completed for your instructions to be executed.

I/We authorize you to act in accordance with my/our instructions set out above. I/We hereby revoke any proxy previously given with respect to the Meeting. If no voting instructions are indicated above, this Proxy will be voted as recommended by Management.

Signature(s)

Date

MM / DD / YY

**Interim Financial Statements** – Mark this box if you would like to receive Interim Financial Statements and accompanying Management's Discussion and Analysis by mail.

☐

**Annual Financial Statements** – Mark this box if you would NOT like to receive the Annual Financial Statements and accompanying Management's Discussion and Analysis by mail.

☐

If you are not mailing back your proxy, you may register online to receive the above financial report(s) by mail at [www.computershare.com/maillinglist](http://www.computershare.com/maillinglist).



L O R Q

2 9 5 9 4 4

A R 2



01LDSC