

REPLICEL LIFE SCIENCES INC.

Suite 900 – 570 Granville Street Vancouver, BC V6C 3P1 Telephone: (604) 248-8730 Fax: (604) 248-8690

NOTICE OF ANNUAL GENERAL AND SPECIAL MEETING OF SHAREHOLDERS

TO THE SHAREHOLDERS OF REPLICEL LIFE SCIENCES INC.:

NOTICE IS HEREBY GIVEN, and that the annual general and special meeting (the "Meeting") of shareholders of RepliCel Life Sciences Inc. (the "Company") will be held at the offices of Clark Wilson LLP, Suite 900, 885 West Georgia Street, Vancouver, BC V6C 3H1 and via ZOOM, on Friday, September 22, 2023, at the hour of 2:00 p.m. (Vancouver time) for the following purposes:

- 1. to receive the audited financial statements of the Company for the financial period ended December 31, 2022, and accompanying report of the auditors;
- 2. to appoint Mao & Ying LLP as the auditors of the Company for the financial year ending December 31, 2023 and to authorize the directors of the Company to fix the remuneration to be paid to the auditors for the financial year ending December 31, 2023;
- 3. to set the number of directors of the Company for the ensuing year at six (6);
- 4. to elect, individually, Andrew Schutte, R. Lee Buckler, David Hall, Peter Lewis, Gary Boddington and Jamie Mackay as the directors of the Company;
- 5. to consider and, if thought fit, to approve the Company's Equity Incentive Plan, including approval of a 10% rolling plan for stock options and a fixed plan of 5,436,230 common shares for performance-based awards of restricted share units, performance share units and deferred share units, all as described in the accompanying management information circular (the "Information Circular");
- 6. to consider and, if thought fit, to approve, an ordinary resolution of the disinterested shareholders of the Company authorizing and approving the extension of expiry date of an aggregate of 860,000 stock options granted to directors and officers on July 30, 2018 from July 30, 2023 to July 30, 2025;
- 7. to consider and, if thought fit, to re-approve the Shareholder Rights Plan dated as of December 8, 2020, as described in the Information Circular; and
- 8. to transact such further or other business as may properly come before the Meeting and any adjournment or postponement thereof.

The accompanying Information Circular provides additional information relating to the matters to be dealt with at the Meeting and is supplemental to, and expressly made a part of, this notice of meeting (the "Notice of Meeting").

The board of directors of the Company has fixed August 16, 2023 as the record date for the determination of shareholders entitled to notice of and to vote at the Meeting and at any adjournment or postponement thereof. Each registered holder of common shares at the close of business on that date is entitled to such notice and to vote at the Meeting in the circumstances set out in the accompanying Information Circular.

If you are a registered holder of common shares of the Company and are unable to attend the Meeting, please vote by following the instructions provided in the form of proxy at least 48 hours (excluding Saturdays, Sundays and holidays recognized in the Province of British Columbia) before the time and date of the Meeting or any adjournment or postponement thereof.

In view of COVID-19, the Company asks that, in considering whether to attend the Meeting in person, shareholders instructions of the Public Health Agency Canada follow of (https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection.html). The Company encourages Shareholders not to attend the Meeting in person if experiencing any of the described COVID-19 symptoms of fever, cough or difficulty breathing. As always, the Company encourages shareholders to vote prior to the Meeting. Shareholders are encouraged to vote on the matters before the Meeting by proxy and to join the Meeting via ZOOM at https://us02web.zoom.us/j/3996018128 Meeting ID: 399 601 8128.

If you are a non-registered shareholder of the Company and received this Notice of Meeting and accompanying materials through a broker, a financial institution, a participant, a trustee or administrator of a retirement savings plan, retirement income fund, education savings plan or other similar savings or investment plan registered under the Income Tax Act (Canada), or a nominee of any of the foregoing that holds your securities on your behalf (an "Intermediary"), please complete and return the materials in accordance with the instructions provided to you by your Intermediary.

DATED at Vancouver, British Columbia, this 23rd day of August, 2023.

By Order of the Board of Directors of

REPLICEL LIFE SCIENCES INC.

"Andrew Schutte"
Andrew Schutte
President, Chief Executive Officer and Director

PLEASE VOTE. YOUR VOTE IS IMPORTANT. WHETHER OR NOT YOU EXPECT TO ATTEND THE MEETING, PLEASE COMPLETE, SIGN AND DATE THE ENCLOSED PROXY FORM AND PROMPTLY RETURN IT IN THE ENVELOPE PROVIDED.