

CAN-FITE BIOPHARMA LTD.

**PROXY FOR THE ANNUAL GENERAL MEETING OF SHAREHOLDERS
TO BE HELD ON JULY 25, 2017**

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS.

The undersigned hereby appoints Ilan Cohen, Chairman of the Board and Dr. Pnina Fishman, Chief Executive Officer and each of them, attorneys, agents and proxies of the undersigned, with full power of substitution to each of them, to represent and to vote on behalf of the undersigned all the ordinary shares in Can-Fite BioPharma Ltd. (the "Company") which the undersigned is entitled to vote at the 2017 Annual General Meeting of Shareholders (the "Annual Meeting") to be held at the offices of the Company, 10 Bareket Street, Petach Tikva, Israel, on Tuesday, **July 25, 2017** at 12:00 p.m. (Israel time), and at any adjournments or postponements thereof, upon the following matters, which are more fully described in the Notice of Annual General Meeting of Shareholders (the "Notice") and Proxy Statement relating to the Annual Meeting ("Proxy Statement").

The undersigned acknowledges receipt of the Notice of the Annual General Meeting of Shareholders and Proxy Statement of the Company relating to the Meeting. All terms that are not defined in this Proxy shall have the same meaning of such terms in the Notice and/or the Proxy Statement.

This Proxy, when properly executed, will be voted in the manner directed herein by the undersigned. If no direction is made with respect to any matter, this Proxy will be voted FOR such matter. Any and all proxies heretofore given by the undersigned are hereby revoked.

(Continued and to be signed on the reverse side)

ANNUAL GENERAL MEETING OF SHAREHOLDERS OF
CAN-FITE BIOPHARMA LTD.

July 25, 2017, 12.00 p.m. (Israel time)

Please date, sign and mail
your proxy card in the
envelope provided as soon
as possible.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" EACH OF THE PROPOSALS FOR THE MEETING

PLEASE SIGN, DATE AND RETURN PROMPTLY IN THE ENCLOSED ENVELOPE.

PLEASE MARK YOUR VOTE IN BLUE OR BLACK INK AS SHOWN HERE

1. To re-elect Pnina Fishman to the Company's Board of Directors for a term expiring at the Company's next annual general meeting of shareholders.
 FOR AGAINST ABSTAIN
2. To re-elect Ilan Cohn to the Company's Board of Directors for a term expiring at the Company's next annual general meeting of shareholders.
 FOR AGAINST ABSTAIN
3. To re-elect Avraham Sartani to the Company's Board of Directors for a term expiring at the Company's next annual general meeting of shareholders.
 FOR AGAINST ABSTAIN
4. To re-elect Guy Regev to the Company's Board of Directors for a term expiring at the Company's next annual general meeting of shareholders.
 FOR AGAINST ABSTAIN
5. To elect Yaacov Goldman to the Company's Board of Directors as an external director for a three-year term ending July 24, 2020.
 FOR AGAINST ABSTAIN

Are you a controlling shareholder in the Company, or have a personal interest in the election of Mr. Goldman other than a personal interest unrelated to relationships with a controlling shareholder of the Company? Please note: If you do not mark either Yes or No, your shares will not be voted for Proposal No. 5.

- YES NO
6. To approve the re-appointment of Kost Forer Gabbay & Kasierer, registered public accounting firm, a member firm of Ernst & Young Global, as the Company's independent auditors for the fiscal year ending December 31, 2017 and until the Company's next annual general meeting of shareholders, and to authorize the Audit Committee to fix such accounting firm's compensation.
 FOR AGAINST ABSTAIN
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7. To approve, by way of a "Framework Transaction", as defined in the Companies Regulations (Relief from Related Party Transactions), 2000, the purchase of directors and officers liability insurance policies for a period of up to three years as described in the accompanying proxy statement.

FOR AGAINST ABSTAIN

Are you a controlling shareholder in the Company, or have a personal interest in the approval of the "Framework Transaction" other than a personal interest unrelated to relationships with a controlling shareholder of the Company? Please note: If you do not mark either Yes or No, your shares will not be voted for Proposal No. 7.

YES NO

In their discretion, the proxies are authorized to vote upon such other matters as may properly come before the Annual Meeting or any adjournment or postponement thereof.

SIGNATURE

Date: _____, 2017

SIGNATURE

Date _____, 2017

Please sign exactly as your name appears on this Proxy. When shares are held jointly, each holder should sign. When signing as executor, administrator, trustee or guardian, please give full title as such. If the signed is a corporation, please sign full corporate name by duly authorized officer, giving full title as such. If signer is a partnership, please sign in partnership name by authorized person.
