

YOUR VOTE IS IMPORTANT. PLEASE VOTE TODAY.

Vote by Internet – Q U I C K ★ ★ ★ E A S Y
IMMEDIATE – 24 Hours a Day, 7 Days a Week or by Mail

ALBIREO PHARMA, INC.

Your internet vote authorizes the named proxies to vote your shares in the same manner as if you marked, signed and returned your proxy card. Votes submitted electronically over the Internet must be received by 11:59 p.m., Eastern Time, on June 7, 2018.



INTERNET/MOBILE –
www.cstproxyvote.com

Use the Internet to vote your proxy. Have your proxy card available when you access the above website. Follow the prompts to vote your shares.



MAIL – Mark, sign and date your proxy card and return it in the postage-paid envelope provided.

PLEASE DO NOT RETURN THE PROXY CARD IF YOU ARE VOTING ELECTRONICALLY.

▲ FOLD HERE • DO NOT SEPARATE • INSERT IN ENVELOPE PROVIDED ▲

Please mark your votes like this



1. To elect three Class II directors to serve three-year terms expiring in 2021:

FOR the Nominees listed below

WITHHOLD AUTHORITY to vote for the nominees listed below

FOR ALL EXCEPT as indicated to the contrary below

4. To ratify the appointment of Ernst & Young LLP as Albireo's independent registered public accounting firm for the fiscal year ending December 31, 2018.

FOR

AGAINST

ABSTAIN

ELECTION OF DIRECTORS

NOMINEES:

01 Ronald H.W.Cooper

02 Anne Klibanski, M.D.

03 Stephanie S. Okey, M.S.

INSTRUCTION: To withhold authority to vote for any individual nominee, mark "For All Except" and write that nominee's name in the space provided below:

EXCEPTIONS _____

2. To approve the Albireo Pharma, Inc. 2018 Equity Incentive Plan.

FOR

AGAINST

ABSTAIN

CONTROL NUMBER

3. To approve the Albireo Pharma, Inc. 2018 Employee Stock Purchase Plan.

FOR

AGAINST

ABSTAIN

Signature _____

Signature _____

Date _____, 2018

Please sign exactly as the name appears on your stock certificate. Joint owners should each sign. When signing as attorney, executor, administrator, trustee or guardian, corporation, please give full title as such. If a corporation, please sign in full corporate name by the President or other authorized officer. If a partnership, please sign in partnership name by an authorized person.

**Important Notice Regarding the Internet Availability of Proxy Materials for the
Annual Meeting of Stockholders**

**The 2018 Proxy Statement and the 2017 Annual Report to Stockholders are
available at:**

<http://ir.albireopharma.com/2018annualmeeting.cfm>

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ANNUAL MEETING OF STOCKHOLDERS OF

ALBIREO PHARMA, INC.

June 8, 2018, 8:30 a.m. ET

10 Post Office Square, Suite 502 South, Boston, Massachusetts 02109

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

THE UNDERSIGNED APPOINTS DAVID CHISWELL, PH.D. AND THOMAS A SHEA AND EACH OF THEM (THE "PROXIES"), AS PROXIES OF THE UNDERSIGNED, WITH THE FULL POWER OF SUBSTITUTION, AND AUTHORIZES EACH OF THEM TO REPRESENT AND VOTE, AS DESIGNATED ON THE REVERSE HEREOF, ALL OF THE SHARES OF COMMON STOCK OF ALBIREO PHARMA, INC., HELD OF RECORD BY THE UNDERSIGNED AT THE CLOSE OF BUSINESS ON APRIL 18, 2018 AT THE ANNUAL MEETING OF STOCK HOLDERS OF ALBIREO PHARMA, INC. TO BE HELD ON JUNE 8, 2018 OR AT ANY ADJOURNMENT OR POSTPONEMENT THEREOF.

The Board of Directors recommends a vote FOR each of the nominees listed in Proposal 1, FOR Proposal 2, FOR Proposal 3 and FOR Proposal 4. This proxy, when properly executed, will be voted as specified above. THIS PROXY REVOKES ALL PRIOR PROXIES GIVEN BY THE UNDERSIGNED. THIS PROXY WILL BE VOTED AS DIRECTED OR IF NO SPECIFICATION IS MADE AND THIS PROXY IS RETURNED, THIS PROXY WILL BE VOTED IN FAVOR OF EACH OF THE NOMINEES LISTED IN PROPOSAL 1, FOR PROPOSAL 2, FOR PROPOSAL 3 AND FOR PROPOSAL 4.

IN THEIR DISCRETION, THE PROXIES ARE AUTHORIZED TO VOTE UPON SUCH OTHER BUSINESS AS MAY PROPERLY COME BEFORE THE MEETING OR AT ANY ADJOURNMENT OR POSTPONEMENT THEREOF.

PLEASE SIGN, DATE AND MAIL THIS PROXY CARD TO THE COMPANY PROMPTLY.