

YOUR VOTE IS IMPORTANT. PLEASE VOTE TODAY.



**2016 Annual Meeting of
Stockholders**

**Tuesday, June 14, 2016,
1:00 p.m., Pacific Time**

**This Proxy is Solicited On Behalf
Of The Board of Directors**

**Please Be Sure To Mark, Sign, Date and Return Your Proxy Card
in the Envelope Provided**

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

PROXY BY MAIL

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED

Please mark
your votes
like this



OCERA THERAPEUTICS, INC.

The Board of Directors recommends a vote FOR all Nominees:

1. To elect the following seven (7) nominees to our Board of Directors as directors, each to hold office until the Company's 2017 Annual Meeting of Stockholders and until his or her successor is duly elected and qualified, or until his or her earlier death, resignation or removal.

		FOR	WITHHOLD AUTHORITY
NOMINEES:	(01) Eckard Weber, M.D.	<input type="checkbox"/>	<input type="checkbox"/>
	(02) Linda S. Graiss, M.D.	<input type="checkbox"/>	<input type="checkbox"/>
	(03) Steven P. James	<input type="checkbox"/>	<input type="checkbox"/>
	(04) Nina Kjellson	<input type="checkbox"/>	<input type="checkbox"/>
	(05) Michael Powell, Ph.D.	<input type="checkbox"/>	<input type="checkbox"/>
	(06) Anne M. VanLent	<input type="checkbox"/>	<input type="checkbox"/>
	(07) Wendell Wierenga, Ph.D.	<input type="checkbox"/>	<input type="checkbox"/>

The Board of Directors recommends a vote FOR proposals 2, 4 and 5 and EVERY YEAR on proposal 3.

Advisory Say-On-Pay Vote

2. Approval, on an advisory basis, of the compensation of our Named Executed Officers. FOR AGAINST ABSTAIN

Advisory Say-On-Frequency Vote

3. Approval, on an advisory basis, to conduct future advisory votes on the compensation of our Named Executive Officers every year. EVERY YEAR EVERY 2 YEARS EVERY 3 YEARS ABSTAIN

Amendment and Restatement of 2011 Stock Option and Incentive Plan

4. Approval of Ocera Therapeutics, Inc. Fourth Amended and Restated 2011 Stock Option and Incentive Plan. FOR AGAINST ABSTAIN

Vote on Independent Registered Public Accounting Firm

5. Ratification of Ernst & Young LLP, independent accountants, to audit the consolidated financial Statements of the Company for the year ending December 31, 2016. FOR AGAINST ABSTAIN

COMPANY ID:

For address changes/comments, please check this box and write them on the reverse side where indicated.

PROXY NUMBER:

NOTE: In their discretion, the proxies are authorized to vote upon such other business as may properly come before the meeting or any adjournment thereof.

ACCOUNT NUMBER:

Signature _____ **Signature** _____ **Date** _____, 2016.
This proxy should be marked, dated and signed by the stockholder(s) exactly as his or her name(s) appear(s) hereon, and returned promptly in the enclosed envelope. Persons signing in a fiduciary capacity should so indicate. If shares are held by joint tenants or as community property, both should sign.

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting of Stockholders to be held on June 14, 2016.

The notice of the 2016 Annual Meeting of Stockholders and Proxy Statement and the accompanying 2015 Annual Report are available at:
<http://www.cstproxy.com/ocerainc/2016>

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PROXY

OCERA THERAPEUTICS, INC.

Annual Meeting of Stockholders

June 14, 2016 1:00 p.m. Pacific Time

To be held at Ocera Therapeutics, Inc., 525 University Avenue, Suite 1350 Palo Alto, California 94301

THIS PROXY IS SOLICITED BY THE BOARD OF DIRECTORS

Linda S. Grais, M.D. and Michael Byrnes and each of them, as proxies, with full power of substitution in each of them, are hereby authorized to represent and to vote, as designated on the reverse side, on all proposals and in the discretion of the proxies on such other matters as may properly come before the annual meeting of stockholders of Ocera Therapeutics, Inc. (the "Company") to be held on Tuesday, June 14, 2016 or any adjournment(s), postponement(s), or other delay(s) thereof (the "Annual Meeting"), all shares of common stock of the Company to which the undersigned is entitled to vote at the Annual Meeting.

The validity of this proxy is governed by Delaware law. This proxy does not revoke any prior powers of attorney except for prior proxies given in connection with the Annual Meeting.

UNLESS OTHERWISE DIRECTED, THIS PROXY WILL BE VOTED "FOR" EACH OF THE NOMINEES TO THE BOARD OF DIRECTORS AND "FOR" PROPOSALS NO. 2, 4 AND 5, AND "EVERY YEAR" FOR PROPOSAL 3 AND WILL BE VOTED IN THE DISCRETION OF THE PROXIES ON SUCH OTHER MATTERS AS MAY PROPERLY COME BEFORE THE ANNUAL MEETING. THE BOARD OF DIRECTORS HAS PROPOSED AND UNANIMOUSLY RECOMMENDS THAT STOCKHOLDERS VOTE "FOR" EACH OF THE NOMINEES TO THE BOARD OF DIRECTORS AND "FOR" PROPOSALS NO. 2, 4 AND 5 AND "EVERY YEAR" FOR PROPOSAL 3.

Address Change/ _____
Comments _____

(If you noted any Address Changes/Comments above, please mark corresponding box on the reverse side)

PLEASE SIGN, DATE AND MAIL THIS PROXY CARD TODAY IN THE ENCLOSED POSTAGE-PAID ENVELOPE.

(Continued, and to be marked, dated and signed, on the other side)