

August 16, 2017

Via EDGAR

U.S. Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, D.C. 20549-3720

Attention: Amanda Ravitz

Tim Buchmiller

Re: Pacific Biosciences of California, Inc.

Registration Statement on Form S-3

Filed August 2, 2017 File No. 333-219642

Acceleration Request

Requested Date: August 18, 2017
Requested Time: 4:00 PM Eastern Time

Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Act of 1933, as amended, Pacific Biosciences of California, Inc. (the "Company") hereby requests that the above-referenced Registration Statement on Form S-3 (File No. 333-219642) (the "Registration Statement") be declared effective at the "Requested Date" and "Requested Time" set forth above or as soon thereafter as practicable, or at such later time as the Company may request by telephone to the staff (the "Staff") of the Securities and Exchange Commission (the "Commission"). The Company hereby authorizes Andrew D. Hoffman of Wilson Sonsini Goodrich & Rosati, Professional Corporation, counsel for the Company, to make such request on the Company's behalf.

The Company requests that it be notified of the effectiveness of the Registration Statement by telephone to Andrew D. Hoffman of Wilson Sonsini Goodrich & Rosati, Professional Corporation, at (650) 849-3240. Please also provide a copy of the Commission's order declaring the Registration Statement effective to Andrew D. Hoffman via facsimile at (650) 493-6811.

Please direct any questions or comments regarding this acceleration request to Andrew D. Hoffman at (650) 849-3240.

1305 O'Brien Drive, Menlo Park, CA 94025

cc: Donna M. Petkanics, Esq.
Andrew D. Hoffman, Esq.
Wilson Sonsini Goodrich & Rosati, Professional Corporation

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Sincerely,

PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

By: /s/ Susan K. Barnes

Susan K. Barnes Executive Vice President, Chief Financial Officer and Principal Accounting Officer