VIA EDGAR

May 21, 2018

United States Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, D.C. 20549 Attention: William Mastrianna

Re: Scholar Rock Holding Corporation Acceleration Request for Registration Statement on Form S-1 File No. 333-224493

Dear Mr. Mastrianna:

Pursuant to Rule 461 under the Securities Act of 1933, as amended (the "**Act**"), Scholar Rock Holding Corporation (the "**Company**") hereby requests that the effective date of the above-referenced registration statement (the "**Registration Statement**") be accelerated to May 23, 2018, at 4:00 p.m., Eastern Time, or as soon thereafter as practicable, unless we or our outside counsel, Goodwin Procter LLP, request by telephone that such Registration Statement be declared effective at some other time. In making this acceleration request, the Company acknowledges that it is aware of its responsibilities under the Act.

Once the Registration Statement is effective, please orally confirm the event with our counsel, Goodwin Procter LLP by calling Laurie Burlingame at (617) 570-1879. We also respectfully request that a copy of the written order from the Securities and Exchange Commission (the "**Commission**") verifying the effective time and date of the Registration Statement be sent to our counsel, Goodwin Procter LLP, Attention: Laurie Burlingame, by facsimile to (617) 321-4370.

If you have any questions regarding this request, please contact Laurie Burlingame of Goodwin Procter LLP at (617) 570-1879.

Sincerely,

SCHOLAR ROCK HOLDING CORPORATION

/s/Nagesh K. Mahanthappa Nagesh K. Mahanthappa, Ph.D. President and Chief Executive Officer

cc: Junlin Ho, VP, Head of Corporate Legal, *Scholar Rock Holding Corporation* Kingsley L. Taft, Esq., *Goodwin Procter LLP* Laurie Burlingame, Esq., *Goodwin Procter LLP*