

POWER OF ATTORNEY

Know all by these presents, that the undersigned hereby constitutes and appoints each of Alison Lawton and Joshua Brumm, signing singly, the undersigned's true and lawful attorney-in-fact to:

- (1) execute for and on behalf of the undersigned, in the undersigned's capacity as an officer and/or director of Kaleido Biosciences, Inc. (the "Company"), (i) Form ID, including any attached documents, to effect the assignment of codes to the undersigned to be used in the transmission of information to the United States Securities and Exchange Commission using the EDGAR System, (ii) Forms 3, 4 and 5, (iii) Schedule 13D, (iv) Schedule 13G and (v) amendments of each thereof, in accordance with Section 16(a) of the Securities Exchange Act of 1934, as amended, and the rules thereunder;
- (2) do and perform any and all acts for and on behalf of the undersigned which may be necessary or desirable to complete and execute any such Form 3, 4 or 5, Schedule 13D, Schedule 13G or any amendments thereto and timely file such form with the United States Securities and Exchange Commission and any stock exchange or similar authority; and
- (3) take any other action of any type whatsoever in connection with the foregoing which, in the opinion of such attorney-in-fact, may be of benefit to, in the best interest of, or legally required by, the undersigned, it being understood that the documents executed by such attorney-in-fact on behalf of the undersigned pursuant to this Power of Attorney shall be in such form and shall contain such terms and conditions as such attorney-in-fact may approve in such attorney-in-fact's discretion.

The undersigned hereby grants to each such attorney-in-fact full power and authority to do and perform any and every act and thing whatsoever requisite, necessary, or proper to be done in the exercise of any of the rights and powers herein granted, as fully to all intents and purposes as the undersigned might or could do if personally present, with full power of substitution or revocation, hereby ratifying and confirming all that such attorney-in-fact, or such attorney-in-fact's substitute or substitutes, shall lawfully do or cause to be done by virtue of this Power of Attorney and the rights and powers herein granted. The undersigned acknowledges that the foregoing attorneys-in-fact, in serving in such capacity at the request of the undersigned, are not assuming, nor is the Company assuming, any of the undersigned's responsibilities to comply with Section 16 or Regulation 13D-G of the Securities Exchange Act of 1934, as amended. The undersigned hereby agrees to indemnify the attorney-in-fact and the Company from and against any demand, damage, loss, cost or expense arising from any false or misleading information provided by the undersigned to the attorney-in-fact.

This Power of Attorney shall remain in full force and effect until the undersigned is no longer required to file Forms 3, 4 and 5 with respect to the undersigned's holdings of and transactions in securities issued by the Company, unless earlier revoked by the undersigned in a signed writing delivered to the foregoing attorneys-in-fact. This Power of Attorney may be filed with the United States Securities and Exchange Commission as a confirming statement of the authority granted herein. This Power of Attorney supersedes any prior power of attorney in connection with the undersigned's capacity as an officer and/or director of the Company. This Power of Attorney shall expire as to any individual attorney-in-fact if such attorney-in-fact ceases to be an executive officer of the Company.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of February 27, 2019.

/s/ Anthony G. Quinn

Name: Anthony G. Quinn