

OMB APPROVAL	
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**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP**

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person* <u>BONNEY MICHAEL W</u>  (Last) (First) (Middle) <u>C/O KALEIDO BIOSCIENCES, INC.</u> <u>65 HAYDEN AVENUE</u>  (Street) <u>LEXINGTON MA 02421</u>  (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>Kaleido Biosciences, Inc. [ KLDO ]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>Executive Chair</u>
	3. Date of Earliest Transaction (Month/Day/Year) <u>02/28/2019</u>	
4. If Amendment, Date of Original Filed (Month/Day/Year)		

**Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned**

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	02/28/2019		P		68,965	A	\$13.95 <sup>(2)</sup>	1,005,968	D	
Common Stock	02/28/2019		P		2,555	A	\$14.65 <sup>(3)</sup>	1,008,523	D	
Common Stock	03/04/2019		C		417,673	A	(1)	1,426,196	D	
Common Stock	03/04/2019		C		225,000	A	(1)	225,000	I	See Footnote <sup>(4)</sup>

**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)**

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	V	(A)	(D)	Date Exercisable	Expiration Date						Title
Series B Preferred Stock	(1)	03/04/2019		C		835,347		(1)	(1)	Common Stock	417,673	(1)	0	D	
Series B Preferred Stock	(1)	03/04/2019		C		450,000		(1)	(1)	Common Stock	225,000	(1)	0	I	See Footnote <sup>(4)</sup>

**Explanation of Responses:**

- Each share of Series B Preferred Stock converted into shares of the Issuer's common stock, par value \$0.001 ("Common Stock"), on a one-for-two basis upon the closing of the Issuer's initial public offering.
- The price reported in Column 4 is a weighted average price. These shares were purchased in multiple transactions at prices ranging from \$13.50 to \$14.35, inclusive. The Reporting Person undertakes to provide to the Issuer, any security holder of the Issuer, or the staff of the Securities and Exchange Commission, upon request, full information regarding the number of shares purchased at each separate price within the range.
- The price reported in Column 4 is a weighted average price. These shares were purchased in multiple transactions at prices ranging from \$14.52 to \$14.72, inclusive. The Reporting Person undertakes to provide to the Issuer, any security holder of the Issuer, or the staff of the Securities and Exchange Commission, upon request, full information regarding the number of shares purchased at each separate price within the range.
- Shares held in the Michael and Alison Bonney 2016 Irrevocable Trust, which has an independent trustee.

**Remarks:**

/s/ Joshua T. Brumm, as  
Attorney in Fact

03/04/2019

\*\* Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

\* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

\*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.