

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

OMB APPROVAL

OMB Number: 3235-0104

Estimated average burden

hours per response: 0.5

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>Ratcliffe Liam</u> (Last) (First) (Middle) <u>C/O DECIPHERA PHARMACEUTICALS, INC.</u> <u>500 TOTTEN POND ROAD</u> (Street) <u>WALTHAM MA 02451</u> (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) <u>09/27/2017</u>	3. Issuer Name and Ticker or Trading Symbol <u>Deciphera Pharmaceuticals, Inc. [DCPH]</u>	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director <input checked="" type="checkbox"/> 10% Owner Officer (give title below) Other (specify below)	5. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
---------------------------------	---	--	---

Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares			
Series B-1 Preferred Stock	(1)	(1)	Common Stock	839,110	(1)	I	See Footnotes ⁽²⁾⁽³⁾
Series B-2 Preferred Stock	(1)	(1)	Common Stock	1,118,722	(1)	I	See Footnotes ⁽²⁾⁽³⁾
Series B-1 Preferred Stock	(1)	(1)	Common Stock	279,703	(1)	I	See Footnotes ⁽⁴⁾⁽⁵⁾
Series B-2 Preferred Stock	(1)	(1)	Common Stock	1,118,722	(1)	I	See Footnotes ⁽⁴⁾⁽⁵⁾
Series C Preferred Stock	(1)	(1)	Common Stock	372,883	(1)	I	See Footnotes ⁽⁴⁾⁽⁵⁾
Stock Option (Right to Buy)	(6)	09/26/2027	Common Stock	67,800	17	D	

Explanation of Responses:

- Represents preferred stock of Deciphera Pharmaceuticals, LLC ("Deciphera, LLC"). Upon the closing of the Issuer's initial public offering, each share of preferred stock will automatically be converted into 5.65 shares of common stock of the Issuer.
- The preferred stock is currently owned by NLV-3 Deciphera, Inc., a wholly-owned subsidiary of New Leaf Ventures III, L.P. ("NLV III") whose sole purpose is to hold equity interests in Deciphera, LLC. Pursuant to that certain Reorganization Agreement and Plan of Merger by and among the Issuer, Deciphera, LLC and the other parties named therein, dated September 26, 2017 and in the form attached as Exhibit 2.1 to the Issuer's registration statement on Form S-1, File No. 333-220299 (the "Merger Agreement"), the Issuer will issue shares of its common stock to NLV III in exchange for the shares of Deciphera, LLC. New Leaf Venture Associates III, L.P. ("NLV Associates III") is the sole general partner of NLV III. New Leaf Venture Management III, L.L.C. ("NLV Management III") is the sole general partner of NLV Associates III. New Leaf Venture Partners, L.L.C.
- (Continued from Footnote 2) ("NLVP") is the investment adviser of NLV III. Each of NLV Associates III and NLV Management III disclaim beneficial ownership of these securities and this report shall not be deemed an admission that NLV Associates III or NLV Management III are beneficial owners of such securities for purposes of Section 16 or for any other purpose, except to the extent of their respective pecuniary interests therein. Each of the Reporting Person, Jeani Delagardelle, Ronald M. Hunt and Vijay K. Lathi (each, a "Member" and collectively, the "Members") is a member of NLV Management III and may be deemed to have shared voting and dispositive power of these securities. Each of the Members disclaims beneficial ownership of these securities and this report shall not be deemed an admission that any of them is the beneficial owner of such securities for purposes of Section 16 or for any other purpose, except to the extent of their respective pecuniary interests therein.
- The preferred stock is currently owned by NLV-G Deciphera, Inc., a wholly-owned subsidiary of New Leaf Biopharma Opportunities I, L.P. ("Biopharma I") whose sole purpose is to hold equity interests in Deciphera, LLC. Pursuant to the Merger Agreement, the Issuer will issue shares of its common stock to Biopharma I in exchange for shares of Deciphera, LLC. New Leaf BPO Associates I, L.P. ("NLBA I") is the sole general partner of Biopharma I. NLV Management III is the sole general partner of NLBA I. NLVP is the investment adviser of Biopharma I.
- (Continued from Footnote 4) Each of NLBA I and NLV Management III disclaim beneficial ownership of these securities and this report shall not be deemed an admission that NLBA I or NLV Management III are beneficial owners of such securities for purposes of Section 16 or for any other purpose, except to the extent of their respective pecuniary interests therein. Each of the Members may be deemed to have shared voting and dispositive power of these securities. Each of the Members disclaims beneficial ownership of these securities and this report shall not be deemed an admission that any of them is the beneficial owner of such securities for purposes of Section 16 or for any other purpose, except to the extent of their respective pecuniary interests therein.
- This stock option award was issued pursuant to Deciphera Pharmaceuticals, Inc.'s 2017 Stock Option and Incentive Plan. This option vests in 48 equal monthly installments at the end of each month following the vesting commencement date of September 14, 2015, subject to continued service through such dates.

Remarks:

/s/ Thomas P. Kelly, Attorney-in-Fact 09/28/2017

** 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 5 (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.

LIMITED POWER OF ATTORNEY

The undersigned hereby constitutes and appoints each of Michael D. Taylor, Ph.D., Thomas P. Kelly and Amanda Stastny, signing singly, and with full power of substitution, 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 officer and/or director of Deciphera Pharmaceuticals, Inc. and/or its subsidiaries (the "Company"), from time to time the following U.S. Securities and Exchange Commission ("SEC") forms: (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 SEC using the EDGAR System; (ii) Form 3, Initial Statement of Beneficial Ownership of Securities, including any attached documents; (iii) Form 4, Statement of Changes in Beneficial Ownership of Securities, including any attached documents; (iv) Form 5, Annual Statement of Beneficial Ownership of Securities in accordance with Section 16(a) of the Securities Exchange Act of 1934, as amended, and the rules thereunder, including any attached documents; (v) Schedule 13D; (vi) Schedule 13G and (vii) amendments of each thereof, in accordance with the Securities Exchange Act of 1934, as amended, and the rules thereunder, including any attached documents;

(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 amendment(s) thereto, and timely file such form(s) with the SEC and any securities exchange, national association 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, acting singly, 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 attorneys-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 attorneys-in-fact.

This Power of Attorney shall remain in full force and effect until the undersigned is no longer required to file such forms 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 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, or legal counsel to, the Company.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of September 25, 2017.

/s/ Liam Ratcliffe, M.D., Ph.D.

Name: Liam Ratcliffe, M.D., Ph.D.