

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

OMB APPROVAL	
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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>Kelly Thomas Patrick</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) Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>Chief Financial Officer</u>	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 <input type="checkbox"/> 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)
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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			
Stock Option (Right to Buy)	(1)	12/17/2025	Common Stock	173,008 ⁽²⁾	1.89	D	
Stock Option (Right to Buy)	(3)	12/17/2025	Common Stock	38,448 ⁽²⁾	1.89	D	
Stock Option (Right to Buy)	(4)	09/26/2026	Common Stock	5,650 ⁽²⁾	3.95	D	
Stock Option (Right to Buy)	(5)	06/03/2027	Common Stock	103,219 ⁽²⁾	6.13	D	

Explanation of Responses:

- This stock option award was issued pursuant to Deciphera Pharmaceuticals, LLC's 2015 Equity Incentive Plan. The option vests in 16 equal quarterly installments at the end of each quarter following the vesting commencement date of February 23, 2015, subject to continued service through such dates.
- These options are currently options to purchase shares of common stock of Deciphera Pharmaceuticals, LLC, a wholly-owned subsidiary of the Issuer, and will be exchanged for options of the Issuer on a 1 to 5.65 basis immediately prior to the closing of the initial public offering of the Issuer (the "Exchange") pursuant to that certain Reorganization Agreement and Plan of Merger by and among the Issuer, Deciphera Pharmaceuticals, LLC and the other parties named therein, dated September 26, 2017 (the "Merger Agreement"). The amount in this Column 3 reflects the options that will be outstanding following the Exchange.
- This stock option award was issued pursuant to Deciphera Pharmaceuticals, LLC's 2015 Equity Incentive Plan. The option vests in 48 equal monthly installments at the end of each month following the vesting commencement date of September 30, 2015, subject to continued service through such dates.
- This stock option award was issued pursuant to Deciphera Pharmaceuticals, LLC's 2015 Equity Incentive Plan. The option vests in 48 equal monthly installments at the end of each month following the vesting commencement date of July 1, 2016, subject to continued service through such dates.
- This stock option award was issued pursuant to Deciphera Pharmaceuticals, LLC's 2015 Equity Incentive Plan. The option vests in 48 equal monthly installments at the end of each month following the vesting commencement date of May 26, 2017, subject to continued service through such dates.

Remarks:

/s/ Thomas P. Kelly 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. 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/ Thomas P. Kelly

Name: Thomas P. Kelly