

**INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES**

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

(Print or Type Responses)

1. Name and Address of Reporting Person* <b>Morenstein Scott D</b>  (Last) (First) (Middle) <b>C/O CAXTON ALTERNATIVE MANAGEMENT LP, 1330 6TH AVENUE, 20TH FLOOR</b>  (Street) <b>NEW YORK, NY 10019</b>  (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) <b>08/01/2017</b>	3. Issuer Name and Ticker or Trading Symbol <b>Molecular Templates, Inc. [MTEM]</b>	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director <input type="checkbox"/> 10% Owner <input type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below)	5. If Amendment, Date Original Filed(Month/Day/Year)
		6. Individual or Joint/Group Filing(Check Applicable Line) <input type="checkbox"/> Form filed by One Reporting Person <input checked="" type="checkbox"/> Form filed by More than One Reporting Person	

**Table I - Non-Derivative Securities Beneficially Owned**

1. Title of Security (Instr. 4) <b>Common Stock</b>	2. Amount of Securities Beneficially Owned (Instr. 4) <b>1,013,787</b>	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5) <b>I</b>	4. Nature of Indirect Beneficial Ownership (Instr. 5) <b>See Footnote (1)</b>
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Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

SEC 1473 (7-02)

**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 control number.**

**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 of Derivative Security: 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			
<b>Warrants</b>	<b>08/01/2017</b>	<b>08/01/2024</b>	<b>Common Stock</b>	<b>506,893</b>	<b>\$ 6.8423</b>	<b>I</b>	<b>See Footnote (1)</b>

**Reporting Owners**

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Morenstein Scott D C/O CAXTON ALTERNATIVE MANAGEMENT LP 1330 6TH AVENUE, 20TH FLOOR NEW YORK, NY 10019	X			
CDK ASSOCIATES, L.L.C. C/O CAXTON CORPORATION, 731 ALEXANDER ROAD, BUILDING #2, SUITE 500 PRINCETON, NJ 08540	X			
CAXTON CORP 731 ALEXANDER ROAD, BUILDING #2 SUITE 500 PRINCETON, NJ 08540	X			
Kovner Bruce C/O CAXTON CORPORATION, 731 ALEXANDER ROAD, BUILDING #2. SUITE 500 PRINCETON, NJ 08540	X			

**Signatures**

/s/ Scott Morenstein		08/10/2017
<small>**Signature of Reporting Person</small>		Date
CDK Associates, L.L.C., By: Caxton Corporation, its Manager, By: /s/ Heath Weisberg, General Counsel		08/10/2017
<small>**Signature of Reporting Person</small>		Date
Caxton Corporation, By: /s/ Heath Weisberg, General Counsel		08/10/2017
<small>**Signature of Reporting Person</small>		Date
Bruce Kovner, By: /s/ Heath Weisberg, Attorney-in-Fact		08/10/2017
<small>**Signature of Reporting Person</small>		Date

## Explanation of Responses:

\* 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).

(1) These shares are held by CDK Associates, L.L.C. and may be deemed to be beneficially owned by (i) Scott Morenstein, a Managing Director of Caxton Alternative Management LP, the investment manager of CDK Associates, L.L.C., (ii) Caxton Corporation, the manager of CDK Associates, LLC and (iii) Bruce Kovner, the chairman and sole shareholder of Caxton Corporation. Scott Morenstein serves as a director of the Issuer. Caxton Corporation, Bruce Kovner and CDK Associates, L.L.C. may be considered directors by deputization due to their affiliation with Scott Morenstein. Each Reporting Person disclaims beneficial ownership of these shares except to the extent of its or his pecuniary interest, if any, therein, and this report shall not be deemed to be an admission that such Reporting Person is the beneficial owner of such securities for purposes of Section 16 or for any other purpose.

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

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

POWER OF ATTORNEY

Know all by these presents, that the undersigned hereby constitutes and appoints Heath Weisberg, signing singly, with full power of substitution, the undersigned's true and lawful attorney-in-fact to:

(1) execute for and on behalf of the undersigned any applications, reports, or documents required or deemed appropriate by the attorney-in-fact to file pursuant to (i) the United States Securities Exchange Act of 1934, as amended, or any rule, or regulation thereunder, including, without limitation, Schedules 13D, 13G, 13F, and 13H, and Forms 3, 4, and 5, (ii) the Securities Act of 1933, as amended, or any rule or regulation thereunder, including, without limitation, Form 144, (iii) the U.S. Commodity Exchange Act, as amended or any rule or regulation thereunder, or (iv) the statutes, rules or regulations of any other domestic or foreign governmental or self-regulatory authority;

(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 applications, reports, or documents;

(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 interests 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 attorney-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 the applicable statutes, rules and regulations.

This Power of Attorney shall remain in full force and effect until revoked by the undersigned in a signed writing delivered to the foregoing attorney-in-fact or otherwise terminated by my death or other event described in section 5-1511 of the New York General Obligations Law.

SIGNATURE AND ACKNOWLEDGMENT:

In Witness Whereof I have hereunto signed my name on the 9th day of May, 2013.

/s/ Bruce Kovner  
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Bruce Kovner

STATE OF NEW YORK     )  
                          ) ss:  
COUNTY OF NEW YORK    )

On the 9th day of May 2013, before me, the undersigned, personally appeared Bruce Kovner, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her capacity, and that by his/her signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

/s/ Cynthia Rosel Rivera  
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Notary Public

AGENT'S SIGNATURE AND ACKNOWLEDGMENT OF APPOINTMENT:

I, Heath N. Weisberg, have read the foregoing Power of Attorney. I am the person identified therein as agent and attorney-in-fact for the principal named therein.

I acknowledge my legal responsibilities.

/s/ Heath N. Weisberg  
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Heath N. Weisberg

STATE OF NEW YORK     )

) ss:  
COUNTY OF NEW YORK          )

On the 9th day of May, 2013, before me, the undersigned, personally appeared Heath N. Weisberg, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her capacity, and that by his/her signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

/s/ Cynthia Rosel Rivera  
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Notary Public