

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>Gust William M.</u> (Last) (First) (Middle) <u>C/O GLYCOMIMETICS, INC.</u> <u>401 PROFESSIONAL DRIVE, SUITE 250</u> (Street) <u>GAITHERSBURG MD 20879</u> (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) <u>01/09/2014</u>	3. Issuer Name and Ticker or Trading Symbol <u>GLYCOMIMETICS INC [GLYC]</u>	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 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)
<u>Common Stock</u>	<u>70,261</u>	<u>I</u>	<u>By Anthem Capital⁽¹⁾</u>

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				
<u>Stock Option (right to buy)</u>	<u>(2)</u>	<u>01/04/2021</u>	<u>Common Stock</u>	<u>12,295⁽³⁾</u>	<u>1.12⁽³⁾</u>	<u>D⁽⁴⁾</u>
<u>Warrant to Purchase Common Stock (right to buy)</u>	<u>12/09/2005</u>	<u>12/09/2015</u>	<u>Common Stock</u>	<u>1,437⁽³⁾</u>	<u>0.33⁽³⁾</u>	<u>I</u> <u>By Anthem Capital⁽¹⁾</u>
<u>Warrant to Purchase Common Stock (right to buy)</u>	<u>07/03/2008</u>	<u>07/03/2018</u>	<u>Common Stock</u>	<u>23,275⁽³⁾</u>	<u>0.33⁽³⁾</u>	<u>I</u> <u>By Anthem Capital⁽¹⁾</u>
<u>Series A-1 Preferred Stock</u>	<u>(5)</u>	<u>(5)</u>	<u>Common Stock</u>	<u>339,686</u>	<u>(5)</u>	<u>I</u> <u>By Anthem Capital⁽¹⁾</u>

Explanation of Responses:

- These securities are held by Anthem Capital II, L.P. ("Anthem"). The general partner of Anthem is Anthem Capital Partners, LLC ("Anthem Partners"). Mr. Gust is a manager of Anthem Partners and may be deemed to share voting and dispositive power over the securities held by Anthem. Mr. Gust disclaims beneficial ownership of the securities, except to the extent of his pecuniary interest therein.
- The shares underlying this option are fully vested.
- The number of underlying shares of common stock and the exercise price reported reflect a 1-for-3.302 reverse stock split of the Issuer's common stock effected on October 25, 2013.
- Mr. Gust received this option in his capacity as a director of the Issuer. The option is held for the benefit of Anthem Capital and may only be exercised at the direction of Anthem Capital. The net proceeds received from the exercise and sale of the shares, if any, would be remitted to Anthem Capital. Mr. Gust disclaims beneficial ownership of the shares underlying the option, except to the extent of his pecuniary interest therein.
- Each share of Series A-1 Preferred Stock is convertible, at any time, at the holder's election, into the Issuer's common stock on a 1-for-3.302 basis. In addition, effective immediately prior to the closing of the Issuer's initial public offering of its common stock, each share of Series A-1 Preferred Stock will automatically convert into approximately 0.3028 shares of the Issuer's common stock. The Series A-1 Preferred Stock has no expiration date.

Remarks:

Exhibit 24.1 - Power of Attorney

/s/ Brian F. Leaf, Attorney-in-
fact 01/09/2014

** 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.

POWER OF ATTORNEY

(For Executing Form ID and Forms 3, 4 and 5)

Know all by these presents, that the undersigned hereby constitutes and appoints each of Brent B. Siler, Brian F. Leaf, Christian E. Plaza, Katie Kazem and Jennifer Don of Cooley LLP, and Rachel K. King of GlycoMimetics, Inc. (the "Company"), the undersigned's true and lawful attorneys-in-fact and agents to:

(1) Prepare, execute in the undersigned's name and on the undersigned's behalf, and submit to the Securities and Exchange Commission (the "SEC") a Form ID, Uniform Application for Access Codes to File on EDGAR, including amendments thereto, and any other documents necessary or appropriate to obtain codes and passwords enabling the undersigned to make electronic filings with the SEC of reports required by Section 16(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or any rule or regulation thereunder;

(2) Prepare, execute in the undersigned's name and on the undersigned's behalf, and submit to the SEC Forms 3, 4 and 5 (including amendments thereto and joint filing agreements in connection therewith) in accordance with Section 16(a) of the Exchange Act and the rules thereunder in the undersigned's capacity as an officer, director or beneficial owner of more than 10% of a registered class of securities of the Company;

(3) Do and perform any and all acts for and on behalf of the undersigned that may be necessary or desirable to prepare and execute any such Form 3, 4 or 5 (including amendments thereto and joint filing agreements in connection therewith) and file such forms with the SEC and any stock exchange, self-regulatory association or any similar authority; and

(4) Take any other action of any type whatsoever in connection with the foregoing that, in the opinion of such attorney-in-fact, may be of benefit to, in the best interest of, or legally required of the undersigned, it being understood that the documents executed by the 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 the attorney-in-fact may approve in the 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, and their substitutes, 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 of the Exchange Act.

This Power of Attorney shall remain in full force and effect until the earliest to occur of (a) 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, (b) revocation by the undersigned in a signed writing delivered to the Company and the foregoing attorneys-in fact or (c) as to any attorney-in-fact individually, until such attorney-in-fact is no longer employed by the Company or Cooley LLP, as applicable.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of the date written below.

Date: 10/16/2013

By: /s/ WILLIAM M. GUST