

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>LABORATORY CORP OF AMERICA HOLDINGS</u>	2. Date of Event Requiring Statement (Month/Day/Year) 08/04/2009	3. Issuer Name and Ticker or Trading Symbol <u>Monogram Biosciences, Inc. [MGRM]</u>	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director <input checked="" type="checkbox"/> 10% Owner Officer (give title below) Other (specify below)	5. If Amendment, Date of Original Filed (Month/Day/Year)
(Last) (First) (Middle) 358 S MAIN ST			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
(Street) BURLINGTON NC 27215			
(City) (State) (Zip)			

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)
Common Stock	19,719,606	I	By Mastiff Acquisition Corp. ⁽¹⁾

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				
Top-Up Option (right to buy)	08/04/2009	(2)	Common Stock 10,623,670	4.55	I	By Mastiff Acquisition Corp. ⁽³⁾

Explanation of Responses:

1. These shares are owned directly by Mastiff Acquisition Corp., which is a wholly-owned subsidiary of Laboratory Corporation of America Holdings ("LabCorp"). LabCorp is the indirect beneficial owner of the reported securities.

2. The Top-Up Option is exercisable, in whole but not in part, at any time prior to the earlier of (i) the Effective Time (as defined in the Agreement and Plan of Merger, dated June 22, 2009 among LabCorp, Mastiff Acquisition Corp., and the issuer (the "Merger Agreement"), filed as Exhibit 2.1 to the Form 8-K filed by the issuer with the Securities and Exchange Commission on June 24, 2009) and (ii) the termination of the Merger Agreement pursuant to Section 7.1 thereof.

3. The right to exercise the Top-Up Option is held directly by Mastiff Acquisition Corp., which is a wholly-owned subsidiary of LabCorp. LabCorp is the indirect beneficial owner of the reported securities.

/s/ F. Samuel Eberts III,

Authorized Person

08/06/2009

** 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.