FREYTAG J WILLIAM Form 3 February 05, 2009 FORM 3 UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549 OMB APPROVAL

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and A Person <u>*</u> FREYTA			2. Date of Event Requiring Statement (Month/Day/Year)	3. Issuer Name and Ticker or Trading Symbol ARCA biopharma, Inc. [ABIO]					
(Last)	(First)	(Middle)	01/27/2009	4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Officer10% Owner OfficerOther (give title below) (specify below)			5. If Amendment, Date Original Filed(Month/Day/Year)		
7169 WATE NIWOT, C	(Street)						 6. Individual or Joint/Group Filing(Check Applicable Line) _X_ Form filed by One Reporting Person Form filed by More than One Reporting Person 		
(City)	(State)	(Zip)	Table I - N	Non-Derivat	ive Securiti	es Be	neficially Owned		
1.Title of Secur (Instr. 4)	rity		2. Amount of Beneficially (Instr. 4)		3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Na Owne (Instr	*		
Common Sto	ock		0		D	Â			
Reminder: Repo owned directly	or indirectly. Perso inforr requi	ons who res nation conta red to respo	nch class of securities benefici pond to the collection of ained in this form are not ond unless the form displ MB control number.		EC 1473 (7-02)			
Т	able II - De	rivative Secu	rities Reneficially Owned (e	g, nuts, calls	warrants, on	ions, c	onvertible securities)		

1. Title of Derivative Security (Instr. 4)	vative Security 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	5. Ownership Form of Derivative	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of	Derivative Security	Security: Direct (D) or Indirect	

3235-0104

January 31,

2005

0.5

Number:

Expires:

response...

Estimated average burden hours per

Edgar Filing: FREYTAG J WILLIAM - Form 3

				Shares		(I) (Instr. 5)	
Option to Purchase Common Stock	(1)	02/02/2017	Common Stock	13,692	\$ 1.68	D	Â
Option to Purchase Common Stock	(2)	05/02/2018	Common Stock	4,174	\$ 1.86	D	Â
Option to Purchase Common Stock	(<u>3)</u>	01/22/2019	Common Stock	1,786	\$ 5.57	D	Â

Reporting Owners

Reporting Owner Name / Address	Relationships						
	Director	10% Owner	Officer	Other			
FREYTAG J WILLIAM 7169 WATERFORD COURT NIWOT, CO 80503	ÂX	Â	Â	Â			
Signatures							
Patrick Wheeler, attorney in fact	02/	05/2009					
**Signature of Reporting Person		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) The options vested as to 3,423 shares on February 2, 2008; and continue to vest by 855 shares at the end of each quarter thereafter.
- (2) The options vest as to 1,043 shares at the end of each quarter following grant date.
- (3) The options are immediately exercisable.

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.