Instruction 1(b).

FORM 5

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Machinatan	D C	20540
Washington,	D.C.	20549

ANNUAL STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

	OMB APPROVAL								
	OMB Number:	3235-0362							
l	Estimated average burden								
l	hours per response:	1.0							

Form 3 H	Ioldings Repo	rted.															
Form 4 Ti	ransactions R	eported.	File	ed pursuant to or Sectior					ities Exchai ompany Act								
Name and Address of Reporting Person* Cole Kathy				DISCO	2. Issuer Name and Ticker or Trading Symbol DISCOVERY LABORATORIES INC /DE/ DSCO]							5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner V Officer (give title Other (specify					
(Last) 2600 KEL	(Fir: LY ROAD	,	3. Statement for Issuer's Fiscal Year Ended (Month/Day/Year) 12/31/2009							Year)	X Officer (give title Other (specify below) Senior VP, Human Resources						
(Street) WARRING (City)	4. If Amendment, Date of Original Filed (Month/Day/Year)							6. Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person									
		Table	e I - Non-Deriv	ative Sec	uritie	s Ac	auire	d. Di	sposed o	of. or	Benefici	ally C	Owne	ed			
1. Title of Security (Instr. 3) 2. Transaction Date		2. Transaction	2A. Deemed Execution Date,		3. Transaction Code (Instr.		4. Securities Acquired (A) or Dispos Of (D) (Instr. 3, 4 and 5)						nt of es ally	6. Ownership Form: Direct (D) or		7. Nature of Indirect Beneficial Ownership	
				(MOHUI/Day/Teal)		0)		Amoui	nt	(A) or (D)	Price	Is:	Issuer's Fiscal Year (Instr. 3 and 4)		Indirect (I) (Instr. 4)		Instr. 4)
Common S	tock ⁽¹⁾		12/31/2008 ⁽²⁾			A	1	1,	728	A	\$1.12	.12 9,906 I by T				y Trust	
Common S	tock ⁽¹⁾		03/31/2009			A	1	1,	719	A	\$1.2	2 11,625 I by				oy Trust	
Common S	tock ⁽¹⁾		06/30/2009			A	1	1,	946	A	\$1.06	06 13,571 I by T					oy Trust
Common S	tock ⁽¹⁾		09/30/2009			A	1	3,	381	A	\$0.61 16,952 I					I l	oy Trust
Common S	tock ⁽¹⁾		12/31/2009			A	1	3,	274	A	\$0.63	3 20,226 I by Trust				oy Trust	
		Та	ble II - Derivat (e.g., p	ive Securi uts, calls,									ned				
Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	5. Numof Derive Securion Acquired (A) or Disposof (D) (Instruand 5)	ative rities ired osed	Expira	Date Exercisable and Diration Date Donth/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4)				9. Number derivative Securities Beneficial Owned Following Reported Transactic (Instr. 4)	Owner Form: Direct or Indi (I) (Ins	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4	Beneficial Ownership (Instr. 4)
					(A)	Date) (D) Exerc		isable	Expiration Date	Title	Amount or Number of Shares						

Explanation of Responses:

- $1.\ Transaction\ reported\ on\ Table\ I\ represents\ Issuer's\ matching\ stock\ contribution\ pursuant\ to\ 401(k)\ plan.$
- $2.\ The\ 401k\ Match\ was\ processed\ on\ Janaury\ 5,\ 2009\ for\ the\ quarter\ ending\ December\ 31,\ 2008$

<u>Kathy Cole</u> <u>02/09/2010</u>

** 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 4 (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.