FORM 5

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

ANNUAL STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

	Form 3 Holdings Reported.	
--	---------------------------	--

Form 4 Tra	ansactions Repo	orted.		or Section	on 30(h) of the In	ivest	tment Co	mpany Act	of 194	0							
1. Name and A	2. Issuer Name and Ticker or Trading Symbol DISCOVERY LABORATORIES INC /DE/ [DSCO]									Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner								
(Last) (First) (Middle) 2600 KELLY ROAD					3. Statement for Issuer's Fiscal Year Ended (Month/Day/Year) 12/31/2010								X Officer (give title Other (specify below) below) Senior VP, Human Resources					
SUITE 100 (Street) WARRINGTON PA 18976-3646			4. If Amend	4. If Amendment, Date of Original Filed (Month/Day/Year)								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	e) (Zi	p)															
		Tabl	le I - Non-Deriv	vative Sec	uritie	s Acq	uire	ed, Dis	posed o	of, or	Bene	eficially	Owned					
Date					Execution Date,		3. Transaction		4. Securities Acquired (A) or Disposed (D) (Instr. 3, 4 and 5)				5. Amount of Securities Beneficially		6. Own	Direct I	7. Nature of Indirect Beneficial	
			(wonth/bay/rear)	onth/Day/Year) if any (Month/Day/Yea		Code (Instr.) ar) 8)				(A) or (D)	Price		Owned at end of Issuer's Fiscal Year (Instr. 3 and 4)		(D) or Indirect (I) (Instr. 4)		Ownership (Instr. 4)	
Common Stock			12/31/2010			A		648(2)		A	\$3.18		3,639(1)		I		By Trust	
Common Stock			09/30/2010			A		654(2)		A		3.15	3,639(1)		I		By Trust	
Common Stock													11,667(1)		(1) D			
Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)																		
1. Title of 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)	Deriva Secur Acqui	rities ired (A) posed (Instr.	Exp (Mo	iration Date of Secundry Underly Derivat (Instr. 3		ecuritie erlying vative tr. 3 and	Security	of Derivative Sec Security (Instr. 5) Own Foll Rep Transher		es ially ng ed etion(s)	10. Ownersh Form: Direct (D) or Indirec (I) (Instr.	Beneficial Ownership t (Instr. 4)		

Explanation of Responses:

- $1. \ All \ share \ amounts \ are \ adjusted \ to \ reflect \ a \ 1-for-15 \ reverse \ split \ that \ was \ effective \ December \ 28, 2010$
- 2. Transaction reported on Table 1 represents issuer's matching stock contribution pursuant to its 401(k) plan.

Kathy Cole

12/31/2010

** 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.