

OMB APPROVAL
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934
(Amendment No.)*

Medical Discoveries, Inc.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

58456E

(Cusip Number)

August 11, 2004

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

Rule 13d-1 (b)

Rule 13d-1 (c)

Rule 13d-1 (d)

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the notes).

CUSIP No. 58456E

1. Name of Reporting Person: Martha Cooper Lang
I.R.S. Identification Nos. of above persons (entities only):

2. Check the Appropriate Box if a Member of a Group:

(a)

(b)

3. SEC Use Only:

4. Citizenship or Place of Organization:
US

5. Sole Voting Power:
5,083,376

Number of
Shares
Beneficially
Owned by
Each Reporting
Person With

6. Shared Voting Power:
0

7. Sole Dispositive Power:
5,083,376

8. Shared Dispositive Power:
0

9. Aggregate Amount Beneficially Owned by Each Reporting Person:
5,083,376

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares:

11. Percent of Class Represented by Amount in Row (9):
5.43%

12. Type of Reporting Person:
IN

Item 1.

- (a) Name of Issuer: Medical Discoveries, Inc.
- (b) Address of Issuer's Principal Executive Offices: 738 Aspenwood Lane, Twin Falls, Idaho 83301

Item 2.

- (a) Name of Person Filing: Martha Cooper Lang
- (b) Address of Principal Business Office or, if none, Residence: P.O. Box 11, Carmel Valley, California 93924-0011
- (c) Citizenship: US
- (d) Title of Class of Securities: Common Stock
- (e) CUSIP Number: 58456E

Item 3. If this statement is filed pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

- (a) Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o).
- (b) Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).
- (c) Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c).
- (d) Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8).
- (e) An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E);
- (f) An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F);
- (g) A parent holding company or control person in accordance with §240.13d-1(b)(1)(ii)(G);
- (h) A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i) A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
- (j) Group, in accordance with §240.13d-1(b)(1)(ii)(J).

Item 4. Ownership.

- (a) Amount beneficially owned: 5,083,376.
- (b) Percent of class: 5.43%.
- (c) Number of shares as to which the person has:
 - (i) Sole power to vote or to direct the vote: 5,083,376.
 - (ii) Shared power to vote or to direct the vote: 0.
 - (iii) Sole power to dispose or to direct the disposition of: 5,083,376.
 - (iv) Shared power to dispose or to direct the disposition of: 0.

Item 5. Ownership of Five Percent or Less of a Class.

Not applicable.

Item 6. Ownership of More than Five Percent on Behalf of Another Person.

Not applicable.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company or Control Person.

Not applicable.

Item 8. Identification and Classification of Members of the Group.

Not applicable.

Item 9. Notice of Dissolution of Group.

Note applicable.

Item 10. Certification.

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

August 18, 2004

Date

/s/ Martha Cooper Lang

Signature

Martha Cooper Lang

Name/Title