

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

SCHEDULE 13G

(RULE 13d-102)

Information to be Included in Statements Filed Pursuant to Section 240.13d-1(b),  
(c) and (d) and Amendments Thereto Filed Pursuant to Section 240.13d-2

Under the Securities Exchange Act of 1934

(Amendment No. \_\_)\*

Enteromedics Inc.

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(Name of Issuer)

Common Stock

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(Title of Class of Securities)

29365M208

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(CUSIP Number)

December 31, 2010

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(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)

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\*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 ("Act") 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).

(Continued on following page(s))

CUSIP No. 29365M208

13G

Page 2 of 8

1. NAME OF REPORTING PERSONS

TIAA-CREF Investment Management, LLC

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) ( )  
(b) ( )

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

NUMBER OF SHARES BENEFICIALLY OWNED  
BY EACH REPORTING PERSON WITH:

- 5. SOLE VOTING POWER 1,849,546
- 6. SHARED VOTING POWER 0
- 7. SOLE DISPOSITIVE POWER 1,849,546
- 8. SHARED DISPOSITIVE POWER 0

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
1,849,546
10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN  
SHARES ( )
11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9  
6.63%
12. TYPE OF REPORTING PERSON  
IA

## 1. NAME OF REPORTING PERSONS

College Retirement Equities Fund- Stock Account

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) ( )  
(b) ( )

## 3. SEC USE ONLY

## 4. CITIZENSHIP OR PLACE OF ORGANIZATION

New York

NUMBER OF SHARES BENEFICIALLY OWNED  
BY EACH REPORTING PERSON WITH:

5. SOLE VOTING POWER 0

6. SHARED VOTING POWER 1,849,546

7. SOLE DISPOSITIVE POWER 0

8. SHARED DISPOSITIVE POWER 1,849,546

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
1,849,54610. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN  
SHARES ( )11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9  
6.63%12. TYPE OF REPORTING PERSON  
IV

ITEM 1(a). NAME OF ISSUER:

EnteroMedics Inc.

ITEM 1(b). ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES:

2800 Patton Road  
St. Paul, MN 55113

ITEMS 2(a)-2(c). NAME, ADDRESS OF PRINCIPAL BUSINESS OFFICE, AND CITIZENSHIP OF PERSONS FILING:

TIAA-CREF Investment Management, LLC ("Investment Management")  
730 Third Avenue  
New York, NY 10017-3206  
Citizenship: Delaware

College Retirement Equities Fund-Stock Account ("CREF Stock Account")  
730 Third Avenue  
New York, NY 10017-3206  
Citizenship: New York

ITEM 2(d). TITLE OF CLASS OF SECURITIES:

Common Stock

ITEM 2(e). CUSIP NUMBER:

29365M208

ITEM 3. IF THIS STATEMENT IS FILED PURSUANT TO RULES 13d-1(b), OR 13d-2(b) OR (c), CHECK WHETHER THE PERSON FILING IS A:

INVESTMENT MANAGEMENT

- (a) ( ) Broker or dealer registered under Section 15 of the Exchange Act.
- (b) ( ) Bank as defined in Section 3(a)(6) of the Exchange Act.
- (c) ( ) Insurance Company as defined in Section 3(a)(19) of the Exchange Act.
- (d) ( ) Investment Company registered under Section 8 of the Investment Company Act of 1940.
- (e) (x) An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E).
- (f) ( ) An employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F).
- (g) ( ) A parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G).
- (h) ( ) A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act.
- (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.
- (j) ( ) Group, in accordance with Rule 13d-1(b)(1)(ii)(J).

## CREF STOCK ACCOUNT

- (a) ( ) Broker or dealer registered under Section 15 of the Exchange Act.
- (b) ( ) Bank as defined in Section 3(a)(6) of the Exchange Act.
- (c) ( ) Insurance Company as defined in Section 3(a)(19) of the Exchange Act.
- (d) (x) Investment Company registered under Section 8 of the Investment Company Act of 1940.
- (e) ( ) An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E).
- (f) ( ) An employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F).
- (g) ( ) A parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G).
- (h) ( ) A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act.
- (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.
- (j) ( ) Group, in accordance with Rule 13d-1(b)(1)(ii)(J).

If this statement is filed pursuant to Rule 13d-1(c), check this box. ( )

ITEM 4. OWNERSHIP

(a) Aggregate amount beneficially owned: 1,849,546 (See Exhibit A attached)

(b) Percent of class: 6.63%

(c) Number of shares as to which person has:

	INVESTMENT MANAGEMENT -----	CREF- STOCK ACCOUNT -----
Sole Voting Power:	1,849,546	0
Shared Voting Power:	0	1,849,546
Sole Dispositive Power:	1,849,546	0
Shared Dispositive Power:	0	1,849,546

ITEM 5. OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS.

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following ( ).

ITEM 6. OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON.

See Exhibit A attached

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.

Not Applicable

## ITEM 10. CERTIFICATIONS.

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.

Date: February 11, 2011

TIAA-CREF INVESTMENT MANAGEMENT, LLC

By: /s/ William J. Wilkinson  
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William J. Wilkinson, Managing Director  
Asset Management Services

COLLEGE RETIREMENT EQUITIES FUND-STOCK ACCOUNT

By: /s/ William J. Wilkinson  
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William J. Wilkinson, Managing Director  
Asset Management Strategy and Operations

## EXHIBIT A

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## ITEM 6. OWNERSHIP.

TIAA-CREF Investment Management, LLC ("Investment Management") is the investment adviser to the College Retirement Equities Fund ("CREF"), a registered investment company, and may be deemed to be a beneficial owner of 1,849,546 shares of Issuer's common stock owned by CREF. These shares were acquired in the ordinary course of business, and not with the purpose or effect of changing or influencing control of the Issuer.