Capstone Therapeutics Corp. Form SC 13G/A February 11, 2011

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

SCHEDULE 13G

Under the Securities Exchange Act of 1934 (Amendment No. 3) *

		CAPSTONE THER	APEUTICS CORP
		(Name of Issuer)	
		common stock	
	(Title	of Class of Securitie	s)
		14068E109	
		(CUSIP Number) December 31,	2010
	(Date of Event W	hich Requires Filing	of this Statement)
	k the appropriate box to des dule is filed:	ignate the rule pursu	ant to which this
	[X] Rule 13d-1(b)		
	[_] Rule 13d-1(c)		
	[_] Rule 13d-1(d)		
init and	remainder of this cover pag tial filing on this form wit for any subsequent amendmen disclosures provided in a p	h respect to the subj t containing informat	ect class of securities,
deeme Act of the	information required in the ed to be "filed" for the pur of 1934 ("Act") or otherwise he Act but shall be subject the Notes).	pose of Section 18 of subject to the liabi	the Securities Exchange lities of that section
CUSIE	P NO. 14068E109	13G	 Page 2 of 8 Pages
(1)	NAMES OF REPORTING PERSONS		ntities only).
	Renaissance Technologies L	LC 26-0385758	
(2)	CHECK THE APPROPRIATE BOX I	F A MEMBER OF A GROUP	(SEE INSTRUCTIONS):

	(b) [_]				
(3)	SEC USE ONLY				
(4)	CITIZENSHIP OR PLACE OF ORGANIZATION				
	Delaware				
		(5) SOLE VOTING POWER			
	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	2,011,300			
		(6) SHARED VOTING POWER			
		0			
		(7) SOLE DISPOSITIVE POWER			
		2,011,300			
		(8) SHARED DISPOSITIVE POWER			
		0			
(9)	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EA	ACH REPORTING PERSON			
(10)	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW	(9) EXCLUDES CERTAIN SHARES			
	(SEE INSTRUCTIONS)	[_]			
(11)	PERCENT OF CLASS REPRESENTED BY AMOUNT I	IN ROW (9)			
	4.93%				
(12)	TYPE OF REPORTING PERSON (SEE INSTRUCTION IA	NS)			
	Page 2 of 8 pa	ages 			
CUS	TP NO. 14068E109 13G	Page 3 of 8 Page			
(1)	NAMES OF REPORTING PERSONS. I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS.	SONS (ENTITIES ONLY).			
	James H. Simons				
(2)	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) [_] (b) [_]				
(3)	SEC USE ONLY				
(4)	CITIZENSHIP OR PLACE OF ORGANIZATION				

	United States		
		(5) SOLE VOTING POWER	
	NUMBER OF SHARES BENEFICIALLY OWNED	0	
	BY EACH REPORTING PERSON WITH:	(6) SHARED VOTING POWER	
		0	
		(7) SOLE DISPOSITIVE POWER	
		0	
		(8) SHARED DISPOSITIVE POWER	
		0	
(9)	AGGREGATE AMOUNT BENEFICIALLY OWNED BY	EACH REPORTING PERSON	
(-)	0		
 (10)	CHECK BOX IF THE AGGREGATE AMOUNT IN R	OW (9) EXCLUDES CERTAIN SHARES	
,	(SEE INSTRUCTIONS) [_]		
(11)	PERCENT OF CLASS REPRESENTED BY AMOUN	T IN ROW (9)	
	0		
(12)	TYPE OF REPORTING PERSON (SEE INSTRUCT	ions)	
	Page 3 of 8	pages	
CUS	SIP NO. 14068E109 13G	Page 3 of 8 Pa	
(1)	NAMES OF REPORTING PERSONS. I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY).		
	RENAISSANCE TECHNOLOGIES HOLDINGS CORP	ORATION 13-3127734	
(2)	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) [_] (b) [_]		
(3)	SEC USE ONLY		
(4)	CITIZENSHIP OR PLACE OF ORGANIZATION		
	Delaware		
		(5) SOLE VOTING POWER	
	NUMBER OF SHARES	2,011,300	

BENEFICIALLY OWNED					
BY EACH REPORTING PERSON WITH:	(6) SHARED VOTING POWER				
	(7) SOLE DISPOSITIVE POWER				
	2,011,300				
	(8) SHARED DISPOSITIVE POWER				
	0				
(9) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EA	CH REPORTING PERSON				
2,011,300					
(10) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) [_]					
(11) PERCENT OF CLASS REPRESENTED BY AMOUNT I	N ROW (9)				
4.93 %					
(12) TYPE OF REPORTING PERSON (SEE INSTRUCTION HC	 (S)				
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CUSIP NO. 14068E109 13G	Page 4 of 8 Pages				
Item 1.					
(a) Name of Issuer					
CAPSTONE THERAPEUTICS CORP					
(b) Address of Issuer's Principal Executive Offices.					
1275 W. Washington Street, Suite 101, Tempe, Arizona 85281					
Item 2.					
(a) Name of Person Filing:					
This Schedule 13G is being filed by Rena ("RTC"), James H. Simons ("Simons") and Corporation ("RTHC").					

(b) Address of Principal Business Office or, if none, Residence.

800 Third Avenue

New York, New York 10022

The principal business address of the reporting persons is:

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(c) Citizenship.

Dr. Simons is a United States citizen, RTC is a Delaware limited liability company, and RTHC is a Delaware corporation.

(d) Title of Class of Securities.

common stock

(e) CUSIP Number.

14068E109

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- Item 3. If this statement is filed pursuant to Rule 13d-1 (b) or 13-d-2 (b) or (c), check whether the person filing is a:
- (a) [_] Broker or dealer registered under section 15 of the Act.
- (b) [_] Bank as defined in section 3(a)(6) of the Act.
- (c) [_] Insurance Company as defined in section 3(a)(19) of the Act.
- (e) [x] Investment Adviser in accordance with Sec.240.13d-1 (b) (1) (ii) (E).
- (f) [_] Employee Benefit Plan or Endowment Fund in accordance with Sec. 240.13d-1 (b) (1) (ii) (F).
- (g) [_] Parent holding company, in accordance with Sec.240.13d-1(b)(1)(ii)(G).
- (h) [_] A savings associations 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 Sec.240.13d-1(b)(1)(ii)(J).

Item 4. Ownership.

(a) Amount beneficially owned.

RTC: 2,011,300 shares

Simons: O shares, because Dr. Simons is no longer deemed to be a control

person of RTC.

RTHC: 2,011,300 shares, comprising the shares beneficially owned by RTHC, because of RTHC's majority ownership of RTC.

(b) Percent of Class.

RTC: 4.93 % Simons: 0 % RTHC: 4.93 %

- (c) Number of shares as to which the person has:
 - (i) sole power to vote or to direct the vote:

RTC: 2,011,300

Simons: 0

RTHC: 2,011,300

(ii) Shared power to vote or to direct the vote: 0

(iii) sole power to dispose or to direct the disposition of:

RTC: 2,011,300

Simons: 0

RTHC: 2,011,300

(iv) Shared power to dispose or to direct the disposition of:

RTC: 0 Simons: 0 RTHC: 0

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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: $[X]^*$

*As of January 1, 2010, James H. Simons ceased to be the beneficial owner of any of the securities reported herein.

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

Certain funds and accounts managed by RTC have the right to receive dividends and proceeds from the sale of the securities which are the subject of this report.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company.

Not applicable

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

Not applicable

Item 9. Notice of Dissolution of a Group.

Not applicable

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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 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

Renaissance Technologies LLC

By: Mark Silber

Executive Vice President

James H. Simons

Renaissance Technologies Holdings Corporation

By: Mark Silber Vice President

Attention: Intentional misstatements or omissions of fact constitute Federal criminal violations (See 18~U.S.C.~1001).

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EXHIBIT 99.1

AGREEMENT REGARDING JOINT FILING

UNDER RULE 13D-1(K) OF THE EXCHANGE ACT

In accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, each of the undersigned agrees to the filing on behalf of each of a Statement on Schedule 13G, and all amendments thereto, with respect to the shares of common stock of CAPSTONE THERAPEUTICS CORP.

Date: February 11, 2011

Renaissance Technologies LLC

By: Mark Silber
Executive Vice President

James H. Simons

Renaissance Technologies Holdings Corporation

By: Mark Silber Vice President

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