ADVANCED CELL TECHNOLOGY, INC.

Form PRER14A August 05, 2009

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

## **SCHEDULE 14A**

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934 (Amendment No. 1)

Filed by the Re	gistrant x					
Filed by a Party	other than the Registrant o					
Check the appro	opriate box:					
X		Preliminary Proxy Statement				
0		Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))				
0		Definitive Proxy Statement				
0		Definitive Additional Materials				
0	Soliciting Material Pursuant to §240.14a-12					
(Name of Regis	ADVA strant as Specified In Its Char	NCED CELL TECHNOLOGY, INC. tter)				
(Name of Perso	on(s) Filing Proxy Statement,	if other than the Registrant)				
Payment of Fili	ng Fee (Check the appropriate	te box):				
x	No fee required.					
0	Fee computed on tab (1)	le below per Exchange Act Rules 14a-6(i)(1) and 0-11.  Title of each class of securities to which transaction applies:				
	(2)	Aggregate number of securities to which transaction applies:				
	(3)	Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth				

the amount on which the filing fee is calculated and state

how it was determined):

	(4)	Proposed maximum aggregate value of transaction:
	(5)	Total fee paid:
o	Fee paid previously with preliminary	y materials.
o	identify the filing for which the offse	ffset as provided by Exchange Act Rule 0-11(a)(2) and etting fee was paid previously. Identify the previous filing the Form or Schedule and the date of its filing.
	(1)	Amount Previously Paid:
	(2)	Form, Schedule or Registration Statement No.:
	(3)	Filing Party:
	(4)	Date Filed:

## ADVANCED CELL TECHNOLOGY, INC. 381 Plantation Street Worcester, MA 01605

# NOTICE OF SPECIAL MEETING OF STOCKHOLDERS \_\_\_\_\_, 2009

To Our Stockholders:	
A Special Meeting of Stockholders of Advanced Cell Technology, Inc., a Delaware corporation (the "Comp"us" or "our"), will be held on, 2009 at, local time, at, for the following processor of the company of the stockholders of Advanced Cell Technology, Inc., a Delaware corporation (the "Comp"us" or "our"), will be held on, 2009 at, local time, at, for the following processor of the company of t	•
1. To consider and act upon a proposal to approve an amendment to the Company's 2005 Stock Incentive "2005 Stock Plan") to increase the number of shares issuable thereunder to a total of 145,837,250 shares; an	
2. To consider and act upon a proposal to approve an amendment to the Certificate of Incorporation Company to effect an increase in the authorized shares of common stock, par value \$0.001 of the Company Stock") from 500,000,000 to 1,750,000,000.	
Only holders of record of the Company's Common Stock as reflected on the stock transfer books of the Corthe close of business on, 2009, will be entitled to notice of and to vote at the meeting. All stockholde cordially invited to attend the meeting.	
YOUR VOTE IS IMPORTANT. PLEASE COMPLETE AND RETURN THE ENCLOSED PROXY IN TENVELOPE PROVIDED WHETHER OR NOT YOU INTEND TO BE PRESENT AT THE MEETING IT PERSON. IF YOU ATTEND THE MEETING, YOU MAY CONTINUE TO HAVE YOUR SHARES VOINSTRUCTED IN THE PROXY OR YOU MAY WITHDRAW YOUR PROXY AT THE MEETING AN YOUR SHARES IN PERSON.	N TED AS
This proxy statement and form of proxy are being sent to our stockholders on or about, 2009.	
IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR T SHAREHOLDER MEETING TO BE HELD ON, 2009.	HE
Pursuant to rules adopted by the Securities and Exchange Commission, you may access a copy of the prox at www.advancedcell.com.	y materials
By Order of the Board of Directors,	
/s/ William M. Caldwell, IV Chief Executive Officer	
Worcester, MA, 2009	
IT IS IMPORTANT THAT YOUR SHARES BE REPRESENTED AT THE MEETING. PLEASE SIGN. I	DATE

AND MAIL THE ENCLOSED PROXY IN THE ENCLOSED ENVELOPE WHICH REQUIRES NO POSTAGE IN

THE UNITED STATES.

## ADVANCED CELL TECHNOLOGY, INC. 381 Plantation Street Worcester, MA 01605

#### PROXY STATEMENT

"our") is soliciting proxies in the	e form enclosed	l with this proxy stater	nent for use at the Company's Special Meeting of, and any adjournments thereof (the
"Meeting").		10 <b>cu</b> 1 time, at	, and any adjournments thereof (the
	GENERAL	INFORMATION ABO	OUT VOTING
How Proxies Work			
	in the manner t	hat you direct, or if yo	ing us your proxy means that you authorize us to u do not direct us, in the manner as
Who May Vote			
business on, 2009 are 6	entitled to receivares of Commo	ve notice of and to vot on Stock outstanding. E	hare (the "Common Stock"), at the close of e their shares at the Meeting. As of July 15, Each share of Common Stock is entitled to one
How to Vote Your Shares			
Stockholders of record may submeeting and voting in person.	mit a proxy by	telephone, via the Inte	rnet or by mail or vote by attending the special
, 2009 by calling the available 24 hours a day. Easy-your instructions have been pro	following toll-follow voice operly recorded sing individual	free telephone number of prompts allow you to allow you to allow proxy control numbers. IF You	shares by telephone until 11:59 p.m. (EDT) on exxx-xxx-xxxx. Telephone proxy submission is submit a proxy for your shares and confirm that submission procedures are designed to OU SUBMIT A PROXY BY TELEPHONE,
2009 by accessing the web site Internet proxy submission is av	at www.xxxxx ailable 24 hour ar instructions h	.com and following these a day. As with telephave been properly reco	Internet until 11:59 p.m. (EDT) on, e instructions you will find on the web site. none proxy submission, you will be given the orded. IF YOU SUBMIT A PROXY VIA THE CARD.
Submitting a Proxy by Mail: If sign it, and return it in the posts			l, simply mark the enclosed proxy card, date and

Attending the Special Meeting: If you are a stockholder of record, you may attend the special meeting and vote in person. If you plan to attend the special meeting, you must bring a form of personal photo identification with you in

order to be admitted. We reserve the right to refuse admittance to anyone without proper proof of share ownership and without proper photo identification.

If your shares of Advanced Cell Common Stock are held in the name of a broker, bank or other nominee, you will receive instructions from the stockholder of record that you must follow for your shares to be voted. Please follow their instructions carefully. Also, please note that if the stockholder of record of your shares of Advanced Cell Common Stock is a broker, bank or other nominee and you wish to vote in person at the special meeting, you must request a legal proxy from your broker, bank or other nominee that holds your shares and present that proxy and proof of identification at the special meeting.

## Revoking a Proxy

You may revoke your proxy before it is voted by:

- providing written notice to the corporate Secretary of the Company before or at the Meeting;
  - submitting a new proxy with a later date; or
    - voting by ballot at the Meeting.

The last vote you submit chronologically (by any means) will supersede your prior vote(s). Your attendance at the Meeting will not, by itself, revoke your proxy.

#### Quorum

In order to carry on the business of the Meeting, we must have a quorum. This means that at least a majority of the outstanding shares eligible to vote must be represented at the Meeting, either by proxy or in person. Abstentions and broker non-votes are counted as present and entitled to vote for purposes of determining a quorum. Treasury shares, which are shares owned by the Company itself, are not voted and do not count for this purpose.

#### Votes Needed

A majority of the votes cast by the holders of all of the shares of Common Stock present or represented and voting on such matter is required to approve the amendment to the 2005 Stock Plan. Broker non-votes and abstentions are not considered to be shares voting on this matter and will, therefore, have no effect on the outcome of the vote on the amendment to the 2005 Stock Incentive Plan. The affirmative vote of a majority of the issued and outstanding shares of Common Stock entitled to vote at the Meeting is required to approve the amendment to our Certificate of Incorporation to effect the increase in our authorized shares of Common Stock. Accordingly, shares which abstain from voting as to such matter, and shares held in "street name" by brokers or nominees who indicate on their proxies that they do not have discretionary authority to vote such shares as to such matter, will have the effect of a vote against the proposal to approve the amendment to our Certificate of Incorporation to effect an increase in our authorized shares of Common Stock.

#### Dissenter's Right of Appraisal

No action will be taken in connection with the proposals described in this Proxy Statement for which Delaware law, ou Certificate of Incorporation or Bylaws provide a right of a shareholder to dissent and obtain appraisal of or payment for such shareholder's shares.

#### Householding of Proxy Materials

Some banks, brokers and other nominee record holders may be participating in the practice of "householding" Proxy Statements and annual reports. This means that only one copy of this Proxy Statement may have been sent to multiple shareholders in your household. We will promptly deliver a separate copy of either document to you if you call or write us at the following address or phone number: 381 Plantation Street, Worcester, MA 01605, phone: 510-748-4900, attention: William M. Caldwell, IV. If you want to receive separate copies of our annual report and Proxy Statement in the future, or if you are receiving multiple copies and would like to receive only one copy for your household, you should contact your bank, broker or other nominee record holder, or you may contact us at the above address and phone number.

#### Other Matters

Our board of directors knows of no other business which will be presented for consideration at the special meeting other than those matters described above. However, if any other business should come before the special meeting, it is the intention of the person named in the enclosed proxy card to vote, or otherwise act, in accordance with his best judgment on such matters.

#### Solicitation of Proxies

The Company will pay the expenses of soliciting proxies, which we anticipate will total approximately \$12,000. Proxies may be solicited on our behalf by directors, officers or employees of the Company, without additional remuneration, in person or by telephone, by mail, electronic transmission and facsimile transmission. Brokers, custodians and fiduciaries will be requested to forward proxy soliciting material to the owners of Common Stock held in their names and, as required by law, the Company will reimburse them for their reasonable out-of-pocket expenses for this service.

#### INTEREST OF CERTAIN PERSONS IN MATTERS TO BE ACTED UPON

No director, executive officer, associate of any director, executive officer or any other person has any substantial interest, direct or indirect, by security holdings or otherwise, in the amendment to the 2005 Stock Plan or the approval of the amendment to our Amended and Restated Certificate of Incorporation that is not shared by all other stockholders, except that our directors and executive officers are eligible to receive awards under the 2005 Stock Plan, as amended.

#### VOTING SECURITIES AND PRINCIPAL HOLDERS THEREOF

## **Voting Securities**

The number of outstanding shares of our Common Stock at the close of business on \_\_\_\_\_\_,2009, the record date for determining our stockholders who are entitled to notice of and to vote on the amendment to our 2005 Stock Plan at the Meeting, and the approval of the amendment to our Certificate of Incorporation, is 499,905,641.

Beneficial Ownership of Directors, Officers and 5% Stockholders

The following table sets forth certain information regarding the beneficial ownership of our Common Stock as of June 15, 2009. On such date, 499,905,641 shares of Common Stock were outstanding. Beneficial ownership is determined in accordance with the applicable rules of the Securities and Exchange Commission and includes voting or investment power with respect to shares of our Common Stock. The information set forth below is not necessarily indicative of beneficial ownership for any other purpose, and the inclusion of any shares deemed beneficially owned in this table does not constitute an admission of beneficial ownership of those shares. Unless otherwise indicated, to our knowledge, all persons named in the table have sole voting and investment power with respect to their shares of Common Stock, except, where applicable, to the extent authority is shared by spouses under applicable state community property laws.

The following table sets forth information regarding beneficial ownership of our capital stock as of June 15, 2009 by:

- Each person, or group of affiliated persons, known to us to be the beneficial owner of more than 5% of the outstanding shares of our Common Stock,
  - Each of our directors and named executive officers, and
  - All of our directors and executive officers as a group.

Number of

	Shares	
	Beneficially Owned	Percentage
5% or Greater Stockholders:		
None		
Directors and Named Executive Officers		
William M. Caldwell, IV, Chief Executive Officer and Chairman of the Board		
of Directors	2,801,021(2)	*%
Robert P. Lanza, M.D., Chief Scientific Officer	2,686,135(3)	*%
Alan C. Shapiro, Ph.D., Director	6,129,432(4)	1.22%
Erkki Ruoslahti, M.D., Ph.D., Director	120,086(5)	*
Gary Rabin, Director	1,862,960(6)	*%
Directors and Executive Officers as a Group (5 persons)	13,599,634	2.66%

Less than 1%

<sup>(1)</sup> Unless otherwise indicated, the address of the beneficial owner is 381 Plantation Street, Worcester, Massachusetts 01605.

- (2) Includes 2,554,273 shares subject to stock options that are currently exercisable or exercisable within 60 days of June 15, 2008 that are held directly by Mr. Caldwell.
- (3) Includes 2,386,135 shares subject to stock options that are currently exercisable or exercisable within 60 days of June 15, 2008.
- (4) Includes (i) indirect ownership of 1,682,346 shares and 2,565,778 shares subject to convertible debentures held by The Shapiro Family Trust and of which Dr. Shapiro may be deemed the beneficial owner, (ii) 1,694,245 shares subject to warrants held by The Shapiro Family Trust and of which Dr. Shapiro may be deemed the beneficial owner, and (iii) 100,000 shares subject to stock options that are currently exercisable or exercisable within 60 days of June 15, 2008.
- (5) Includes 100,000 shares subject to stock options that are currently exercisable or exercisable within 60 days of June 15, 2008.

(6) Includes indirect ownership of 1,862,960 shares issuable upon exercise of certain warrants and upon conversion of the debentures held by PDP I, LLC, which such number of shares represents Mr. Rabin's proportional interest in the total number of shares held by PDP I, LLC, based on his 33.33% equity interest in the entity.

#### **EXECUTIVE COMPENSATION**

The following table summarizes the annual compensation paid to our named executive officers for the two years ended December 31, 2008 and 2007:

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)	Option Awards (\$)	All Other Compensation (\$)	Total (\$)
William M. Caldwell, IV Chief Executive Officer, Principle Financial Officer, and Chairman of the Board of Directors	2008 2007	350,000(1) 348,374	150,000	-	-	2.27((2)	350,995 500,750
Robert P. Lanza, M.D., Chief Scientific Officer	2008 2007	290,000 342,805	35,000 50,000	-	168,237 28,910	` '	493,873 422,198
Jonathan F. Atzen Sr. Vice President, General Counsel	<ul><li>2008</li><li>2007</li></ul>	78,077 338,537	60,000	93,669	1,598 6,391	, , ,	176,345 417,288

<sup>(1)</sup> This amount includes \$80,130 in deferred compensation that was paid to Mr. Caldwell in 2009.

Employment Contracts, Termination of Employment and Change-in-Control Arrangements

Employment Agreement with William M. Caldwell, IV. On December 31, 2004, we entered into an employment agreement with William M. Caldwell, IV, our Chief Executive Officer. The agreement expired in June 2008. Certain terms of the agreement are on a month-to-month basis. The agreement provides for annual compensation in the amount of \$200,000, increasing to \$250,000 upon the completion of an equity financing that results in increased financing to us of at least \$10 million, and an annual bonus of \$50,000 until Mr. Caldwell's salary reaches \$250,000, after which any bonus shall paid be at the discretion of the Board of Directors. We have also agreed to reimburse Mr. Caldwell for certain commuting expenses through June 2005 and relocation expenses after June 2005. Pursuant to his agreement, Mr. Caldwell received 1,903,112 options under the 2005 Stock Plan, 25% of which vested upon grant

<sup>(2)</sup> This amount represents a life insurance premium paid by the Company for the named executive officer.

<sup>(3)</sup> Effective as of March 7, 2008, Mr. Atzen resigned from his positions at the Company and terminated his employment arrangement with the Company. This amount represents \$2,670 in payments made to Mr. Atzen as part of his \$1,000 monthly car allowance through his termination date and \$331 in life insurance premiums paid by the Company for Mr. Atzen.

<sup>(4)</sup> This amount represents \$12,000 in payments made to Mr. Atzen as part of his \$1,000 monthly car allowance and \$360 in life insurance premiums paid by the Company for Mr. Atzen.

with the remainder vesting in equal monthly installments over 30 months. In the event of a change of control of us, 50% of any unvested options held by Mr. Caldwell will become vested. The agreement provides for severance in the amount of six months' salary in the event Mr. Caldwell's employment is terminated without cause and accelerated vesting of 50% of any unvested options. In the event Mr. Caldwell's employment is terminated without cause following a change of control, he is entitled to a lump sum severance payment equal to six months' base salary and accelerated vesting of 100% of any unvested stock options.

Mr. Caldwell's agreement contains non-solicitation, confidentiality and non-competition covenants, and a requirement that Mr. Caldwell assign all invention and intellectual property rights to us. The agreement may be terminated by either party with or without cause with thirty days' written notice.

Employment Agreement with Robert P. Lanza, M.D. On February 1, 2005, we entered into an employment agreement with Robert P. Lanza, M.D., who was promoted to Chief Scientific Officer effective October 6, 2007. The agreement provides for annual compensation in the amount of \$215,000, plus a performance-based bonus of \$35,000 for fiscal year 2005 upon the achievement of certain milestones established by the Chief Scientific Officer. Dr. Lanza received 500,000 stock options under the 2005 Stock Plan, which vest in equal monthly installments over 48 months. In addition, on September 16, 2005, Dr. Lanza was awarded 250,000 options that were immediately vested. In the event Dr. Lanza's employment is terminated following a change of control, 100% of any unvested options will become vested. In the event Dr. Lanza continues in the employment of a successor company following a change of control, the vesting of Dr. Lanza's unvested options will be accelerated by one year. Dr. Lanza's agreement provides for severance in the amount of twelve months' salary following termination of employment (1) as a result of disability, (2) without cause, (3) by Dr. Lanza following a material change in duties or a material breach by us, or (4) as a result of a change of control.

Dr. Lanza's agreement contains non-solicitation, confidentiality and non-competition covenants, and a requirement that Dr. Lanza assign all invention and intellectual property rights to us. The term of the agreement expires February 1, 2009, which may be renewed by the parties in writing.

Employment Agreement with Jonathan F. Atzen. On April 1, 2005, we entered into an employment agreement with Jonathan F. Atzen, our Senior Vice President and General Counsel. The agreement provides for annual compensation of \$195,000, increasing to \$245,000 upon the completion of an equity financing that results in increased financing to us of at least \$10 million. The agreement provides for an annual bonus as determined by our Chief Executive Officer and our Board of Directors. Mr. Atzen received a one-time advance of an annual bonus in the amount of \$40,000. Mr. Atzen was awarded 400,000 stock options under the 2005 Stock Plan, 10% of which vested upon grant with the remainder vesting in equal monthly installments over 48 months. In the event of a change of control of us, 50% of any unvested options held by Mr. Atzen will become vested. In the event Mr. Atzen's employment is terminated without cause by us or for good reason by Mr. Atzen, he is entitled to a lump sum severance payment equal to six months' base salary, accelerated vesting of 50% of his unvested stock options, and reimbursed cost of medical coverage for a period of six months. In the event Mr. Atzen is terminated without cause following a change of control, he is entitled to a lump sum severance payment equal to six months' base salary and accelerated vesting of 50% of any unvested stock options. Effective March 7, 2008, Mr. Atzen resigned from his positions with the Company and terminated his employment arrangement with the Company. In connection with Mr. Atzen's resignation, the Company agreed to (i) pay Mr. Atzen \$48,333.33 as a severance payment, (ii) issue a fully vested option to purchase an aggregate of 400,000 shares of common stock of the Company, (iii) issue an aggregate of 936,692 shares of the common stock of the Company, (iv) provide for the vesting of all outstanding stock options held by Mr. Atzen and (v) provide Mr. Atzen and his family with full healthcare and dental coverage for a period of 6 months as was provided to Mr. Atzen during his employment.

#### Outstanding Equity Awards at Fiscal Year-End

	Number of	Number of		
	Securities	Securities		
	Underlying	Underlying	Option	Option
	Unexercised	Unexercised	Exercise	Expiration
	Options (#)	Options (#)	Price	Date
Name	Exercisable	Unexercisable	(\$)	(\$)
William M. Caldwell, IV	651,161(1)	-	0.25	12/31/2014
Chief Executive Officer and	1,903,112(1)	-	0.85	1/31/2015
Chairman of the Board of Directors				
Robert P. Lanza, M.D.,	750,000(2)	-	0.05	8/12/2014
Chief Scientific Officer	489,583(3)	10,417	0.85	1/31/2015
	250,000(2)	-	2.20	9/15/2015
	896,552(3)	3,103,448	0.21	2/7/2018

- (1) These options held by Mr. Caldwell vest as follows: 25% vested immediately upon grant with the remainder vesting in equal monthly installments over 30 months.
- (2) These options held by Dr. Lanza vested in full as of December 31, 2006.
- (3) These options held by Dr. Lanza vest in equal monthly installments over 48 months.

#### **DIRECTOR COMPENSATION**

Name and Principal Position	Year	Fees Earned or Paid in Cash (\$)	Stock Awards (\$)	Option Awards (\$)	All Other Compensation (\$)	Total (\$)
Alan C. Shapiro, Ph.D.	2008	70,000	-			70,000
Alan G. Walton, Ph.D., D.Sc.	2008	-	-			-
Erkki Ruoslahti, M.D., Ph.D.	2008	-	-			-
Michael West	2008	-	-			-

#### **Director Compensation Arrangements**

Non-executive members of the Company's Board of Directors receive (1) an initial grant of 100,000 shares of common stock, (2) an annual grant of 100,000 shares of common stock (this number has been increased to 200,000 for 2008), (3) an annual retainer of \$40,000 (payable quarterly) and (4) a cash payment for attendance at each board meeting in the amount of \$1,500 for in-person meetings and \$1,000 for telephonic meetings. Regarding members of the Company's Audit Committee, the Chair receives a payment of \$1,500 per meeting and the regular members receive \$1,000 per meeting. With respect to the Company's Compensation Committee and the Company's Nominating and Corporate Governance Committee, the Chair receives a payment of \$1,125 per meeting and the regular members receive \$750 per meeting. Each director is entitled to receive payment of the directors' fees in the form of shares of the Company's Common Stock valued at 150% of the actual directors' fees due and payable. The fee structure for the directors was established and approved by the Compensation Committee and ratified by the full Board of Directors.

#### PROPOSAL ONE—AMENDMENT TO THE 2005 STOCK INCENTIVE PLAN

Our Board of Directors adopted the 2005 Stock Plan on January 31, 2005. The Board of Directors initially authorized the issuance of up to 9,000,000 shares of Common Stock under this 2005 Stock Plan, plus an annual increase on the first day of each of the Company's fiscal years beginning in 2006 equal to 5% of the shares of common stock outstanding on the last day of the immediately preceding fiscal year.

In October 2007, the Board approved, upon the recommendation of the Compensation Committee and subject to stockholder approval, an amendment to the 2005 Stock Plan to increase the total number of shares of the Company's common stock available for issuance thereunder by 25,000,000. Shareholder approval for the amendment was obtained on January 24, 2008.

In June 2009, the Board approved, upon the recommendation of the Compensation Committee and subject to shareholder approval, an amendment to the 2005 Stock Plan to increase the total number of shares of the Company's Common Stock available for issuance thereunder by 100,000,000 shares, to a total of 145,837,250 shares.

We are seeking stockholder approval in order to amend the 2005 Stock Plan to increase the total number of shares of the Company's Common Stock available for issuance thereunder by 100,000,000 shares.

As of July 15, 2009, 33,472,831 shares of Common Stock remained available for issuance under the 2005 Stock Plan.

#### Reasons for the Proposed Amendment

As described above, we are seeking stockholder approval of the amendment to increase the number of shares issuable pursuant to the 2005 Stock Plan by 100,000,000 shares. In determining the amount of the increase contemplated by the proposed amendment to the 2005 Stock Plan, the Board has taken into consideration the fact that, as of July 15, 2009, there were approximately 750,000,000 shares of our Common Stock outstanding on a fully-diluted basis, and the Board believes that this fully-diluted number, rather than the number of outstanding shares of the Company, is the relevant number in determining the appropriate number of shares available under the 2005 Stock Plan. Assuming the approval of this increase, the total number of shares of our Common Stock available for issuance under the 2005 Stock Plan will be 145,837,250, which represents approximately17.5%) of our Common Stock as calculated on a fully-diluted basis. In addition, pursuant to the Consent, Waiver, Amendment and Exchange Agreement, dated as of July 29, 2009, among the Company and each of the holders identified on the signature pages thereof (discussed under Proposal No. 2 below), the Company agreed to seek shareholder approval for an amendment to the 2005 Stock Plan to increase the number of shares available for issuance under the 2005 Stock Plan by 100,000,000 shares.

The purpose of this increase is to continue to be able to attract, retain and motivate executive officers and other employees and certain consultants. Upon stockholder approval, additional shares of Common Stock will be reserved for issuance under the 2005 Stock Plan, which will enable us to continue to grant equity awards to our officers, employees and consultants at levels determined by the Compensation Committee to be necessary to attract, retain and motivate the individuals who will be critical to the Company's success in achieving its business objectives and thereby creating greater value for all our stockholders.

Furthermore, we believe that equity compensation aligns the interests of our management and other employees with the interests of our other stockholders. Equity awards are a key component of our incentive compensation program. We believe that option grants have been critical in attracting and retaining talented employees and officers, aligning their interests with those of stockholders, and focusing key employees on the long-term growth of the

Company. We anticipate that option grants and other forms of equity awards such as restricted stock awards may become an increasing component in similarly motivating our consultants.

Approval of the amendment to the 2005 Stock Plan will permit the Company to continue to use stock-based compensation to align stockholder and employee interests and to motivate employees and others providing services to the Company or any subsidiary.

The terms of the 2005 Stock Plan are summarized below, and the full text of the proposed amendment to the 2005 Stock Plan is set forth as Appendix A to this proxy statement. It is intended that the 2005 Stock Plan qualify as an incentive stock option plan meeting the requirements of Section 422 of the Internal Revenue Code of 1986, as amended (the "Code").

#### Summary of the 2005 Stock Plan

Officers, employees and directors of, and consultants and advisors to the Company, and any parent corporation, subsidiary or affiliated entity are eligible to receive awards under the 2005 Stock Plan at the discretion of the Board of Directors or its designated committee. Approximately33 employees, directors and consultants are eligible to receive awards under the 2005 Stock Plan as of July 15, 2009.

The Board, or a committee designated by the Board, has authority to, among other things:

- Determine fair market value of the Common Stock in accordance with the terms of the 2005 Stock Plan;
  - Select employees, directors and consultants to receive awards;
  - Determine whether and to what extent awards are granted;
  - Determine the number of shares to be covered by an award;
- Determine the terms and conditions of the awards, including exercise price, vesting, availability of cashless exercises, and implementation of the option exchange program; and
  - Interpret the plan document.

Officers, employees and directors of the Company, and consultants and advisors to the Company, and any parent corporation, subsidiary or affiliated entity are eligible to receive nonstatutory stock options, stock purchase rights and other stock-based awards under the 2005 Stock Plan. Only employees of the Company, and any parent corporation or subsidiary, are eligible to receive incentive stock options under the 2005 Stock Plan.

Incentive stock options may not be priced at less than 100% of the fair market value of our Common Stock on the date of grant (110% of fair market value in the case of individuals holding 10% or more of our Common Stock). Except as otherwise determined by the Board, in the case of nonstatutory options, the exercise price may not be less than 100% of the fair market value on the date of grant in accordance with applicable law. The fair market value of our Common Stock on July 20, 2009, was \$.185, based on the last sale price of our Common Stock as reported by the Pink Sheets on that date. The 2005 Stock Plan provides that stock options and similar awards may be issued with exercise periods of up to 10 years.

Payment of the exercise price of options under the 2005 Stock Plan may be made in the form of: (1) cash; (2) check; (3) delivery of a promissory note; (4) cancellation of indebtedness; (5) surrender of other shares of Common Stock owned by the recipient for longer than six months; (6) cashless brokered exercise program; (7) or any combination thereof, as determined by the Board of Directors.

In the event of termination of employment or consulting relationship for any reason other than disability, death or for cause, the award recipient may exercise his or her vested options within 30 days of the date of such termination. In the event of termination as a result of disability, the award recipient may exercise his or her vested options within six months following the date of such termination. In the event of death, the award recipient's estate may exercise his or her vested options within 12 months following the date of death. In the event of termination for cause, all options held by the recipient will terminate immediately.

Awards of stock purchase rights may also be made under the 2005 Stock Plan at an exercise price of not less than 100% of the fair market value of the Common Stock on the date of the offer. The Company may have the right to repurchase the stock in the event of a voluntary or involuntary termination of employment with the Company for any reason.

The Board has discretion to grant other stock-based awards, provided, however, that no such awards may be made unless the terms of the 2005 Stock Plan and the awards are in compliance with Section 409A of the Code.

Transfers of awards may not be made other than by will or by the laws of descent and distribution. During the lifetime of a participant, an award may be exercised only by the participant to whom the award is granted.

Subject to the provisions of the 2005 Stock Plan or an award agreement, the Board may not amend any outstanding award agreement without the participant's consent if the action would adversely affect the participant's rights. The Board may assist a participant in satisfying the participant's tax withholding obligations by allowing the participant to elect to have the Company withhold shares that would otherwise be delivered upon exercise or receipt of the award or by delivering to the Company shares already owned with a value equal to the amount of the taxes. Further, the Board may at any time implement an option exchange program whereby outstanding options under the 2005 Stock Plan are exchanged for options with a lower exercise price or are amended to decrease the exercise price as a result of a decline in the fair market value of the Common Stock.

## Federal Income Tax Consequences

The following is a summary of the principal U.S. federal income tax consequences generally applicable to awards under the 2005 Stock Plan. This summary does not purport to consider all of the possible U.S. federal tax consequences of the awards and is not intended to reflect the particular tax position of any award recipient. This summary is based upon the U.S. federal tax laws and regulations now in effect and as currently interpreted and does not take into account possible changes in such tax laws or such interpretations, any of which may be applied retroactively. Award recipients are strongly advised to consult their own tax advisors for additional information.

Grant of an Option The grant of an option is not expected to result in any taxable income for the recipient as of the date of the grant, except that in the event non-statutory options are granted with an exercise price lower than the then-current fair market value of the Common Stock, the difference between the exercise price and the then-current fair market value may be treated as deferred compensation income recognized as of the date the non-statutory options are granted.

Exercise of Incentive Stock Option The holder of an incentive stock option generally will have no taxable income upon exercising the option (except that a tax liability may arise pursuant to the alternative minimum tax), and the Company will not be entitled to a tax deduction.

Exercise of Nonqualified Stock Option Generally, subject to Code Section 409A, upon exercising a nonqualified stock option, the award recipient must recognize ordinary income equal to the excess of the fair market value of the shares of Common Stock acquired on the date of exercise over the exercise price. The income will be treated as compensation income subject to payroll and withholding tax obligations. The Company would be entitled to a compensation deduction in the amount of income recognized by the award recipient.

Disposition of Shares Acquired Through an Option The tax consequence to a holder of an option upon a disposition of shares acquired through the exercise of an option will depend on how long the shares have been held and upon whether such shares were acquired by exercising an incentive stock option or by exercising a nonqualified stock option.

Generally, the disposition of shares which were acquired by exercise of an incentive stock option will be taxable as long-term capital gain or loss if the award recipient disposes of the shares more than two years after the option was granted and at least one year after exercising the option. If the award recipient fails to satisfy the holding period requirements for treatment as an incentive stock option, a disposition will result in any gain being treated as compensation income subject to ordinary tax rates. If the award recipient is still an employee of the Company at the time of the disposition, the amount of gain treated as compensation will also be subject to payroll and withholding taxes.

If an award recipient disposes of shares acquired through the exercise of a nonqualified option, any gain or loss will be treated as a capital gain or loss. To the extent such shares have been held for at least one year after exercise of

the nonqualified option, the gain or loss will be treated as long-term capital gain or loss.

Generally, there will be no tax consequence to the Company in connection with the disposition of shares acquired under an option, except that the Company may be entitled to a tax deduction in the case of the disposition of shares acquired under an incentive stock option before the applicable incentive stock option holding periods set forth in the Code have been satisfied.

The grant by the Board of other stock-based awards may have varying tax consequences to award recipients. Grants made pursuant to the 2005 Stock Plan may be subject to Code Section 409A and plan administration may have to conform to Code Section 409A. Failure to comply with Code Section 409A, if applicable, will result in acceleration of income and imposition of penalties and interest to award recipients.

Application of Section 16 of the Securities Exchange Act of 1934 Special rules may apply in the case of individuals subject to Section 16 of the Securities Exchange Act of 1934, as amended. In particular, unless a special election is made pursuant to the Code, shares received pursuant to the exercise of a stock option may be treated as restricted as to transferability and subject to a substantial risk of forfeiture for a period of up to six months after the date of exercise. Accordingly, the amount of any ordinary income recognized, and the amount of the Company's tax deduction, are determined as of the end of such period.

Delivery of Shares to Satisfy Tax Obligation Under the 2005 Stock Plan, participants may deliver shares of Common Stock (either shares received upon the receipt or exercise of the award or shares previously owned by the holder of the option) to the Company to satisfy federal and state tax obligations unless the Board provides to the contrary in the award agreement.

#### New Plan Benefits

Future awards under the 2005 Stock Plan to our non-employee directors, executive officers and employees are made at the discretion of the Compensation Committee. At this time, therefore, the benefits that may be received by our executive officers and other employees if our stockholders approve the proposed amendment to the 2005 Stock Plan cannot be determined, and we have not included a table reflecting such benefits and awards. By way of background, please see compensation tables for information regarding equity awards to our named executive officers in fiscal year 2008.

#### **EQUITY COMPENSATION PLAN INFORMATION**

			Number of securities
			remaining available
	Number of securities		for issuance under
	to be issued upon exercise of	exercise price of	equity compensation plans (excluding
	outstanding options,	outstanding options	, securities reflected
Plan Category	warrants and rights	warrants and rights	in column (a))
	(a)	(b)	(c)
Equity compensation plans approved by security			
holders	14,485,580(1)	\$ 0.55	33,826,831(2)
Equity compensation plans not approved by			
security holders	6,080,391	0.59	-
Total	20,565,971	0.56	33,826,831

- (1) Awards for 820,000 options have been issued under the Advanced Cell Technology, Inc. 2004 Stock Option Plan I ("2004 Plan 1"), 1,301,161 options have been issued under the Advanced Cell Technology, Inc. 2004 Stock Option Plan II ("2004 Plan 2" and together with the 2004 Plan I, the "2004 ACT Plans"), and 12,364,419 options have been issued under the 2005 Stock Plan.
- (2) This number included 370,000 shares available under the 2004 Plan I and 33,456,831 shares available under the 2005 Stock Plan.

#### Vote Required

The affirmative vote of a majority of the shares (by voting power) present in person at the Meeting or represented by proxy and entitled to vote at the Meeting is required to approve the amendment to the 2005 Stock Plan.

#### **Board Recommendation**

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" APPROVAL OF AN AMENDMENT TO THE COMPANY'S 2005 STOCK PLAN TO INCREASE THE NUMBER OF SHARES AVAILABLE FOR ISSUANCE THEREUNDER.

\* \* \*

# PROPOSAL TWO—APPROVAL OF AMENDMENT TO CERTIFICATE OF INCORPORATION TO EFFECT INCREASE IN AUTHORIZED SHARES OF COMMON STOCK FROM 500,000,000 to 1,750,000,000

## Background

The Board of Directors of the Company has approved, subject to shareholder approval, an amendment to our Amended and Restated Certificate of Incorporation to effect an increase in our authorized shares of Common Stock from 500,000,000 to 1,250,000,000. The Company currently has authorized 500,000,000 shares of Common Stock and 50,000,000 shares of preferred stock, par value \$0.001 ("Preferred Stock"), of which 499,905,641 shares of Common Stock and 0 shares of Preferred Stock are outstanding as of July 15, 2009.

The terms of the additional shares of Common Stock will be identical to those of the currently outstanding shares of Common Stock. However, because holders of Common Stock have no preemptive rights to purchase or subscribe for any unissued stock of the Company, the issuance of additional shares of Common Stock will reduce the current stockholders' percentage ownership interest in the total outstanding shares of Common Stock. This amendment and the creation of additional shares of authorized Common Stock will not alter the current number of issued shares. The relative rights and limitations of the shares of Common Stock will remain unchanged under this amendment.

As noted above, as of July 15, 2009, a total of 499,905,641 shares of the Company's currently authorized 500,000,000 shares of Common Stock are outstanding. In addition, the Company currently has outstanding Amended and Restated Debentures (defined below) convertible into171,759,306 shares of Common Stock and Amended and Restated Warrants (defined below) exercisable into 205,251,285 shares of Common Stock. Accordingly, the Company currently does not have sufficient authorized but unissued shares of Common Stock to permit conversion of the Amended and Restated Debentures and exercise of the Amended and Restated Warrants. The increase in the number of authorized but unissued shares of Common Stock would enable the Company, without further shareholder approval, to issue shares to holders of the Amended and Restated Debentures and the Amended and Restated Warrants upon the conversion of their respective Amended and Restated Debentures and/or exercise of their respective Amended and Restated Warrants. In addition, the increase in the number of authorized but unissued shares of Common Stock would enable the Company, without further stockholder approval, to issue shares from time to time as may be required for other proper business purposes, such as raising additional capital for ongoing operations, business and asset acquisitions, stock splits and dividends, present and future employee benefit programs and other corporate purposes.

The proposed increase in the authorized number of shares of Common Stock could have a number of effects on the Company's stockholders depending upon the exact nature and circumstances of any actual issuances of authorized but unissued shares. The increase could have an anti-takeover effect, in that additional shares could be issued (within the limits imposed by applicable law) in one or more transactions that could make a change in control or takeover of the Company more difficult. For example, additional shares could be issued by the Company that may dilute the stock ownership or voting rights of persons seeking to obtain control of the Company, even if the persons seeking to obtain control of the Company offer an above-market premium that is favored by a majority of the independent shareholders. Similarly, the issuance of additional shares to certain persons allied with the Company's management could have the

effect of making it more difficult to remove the Company's current management by diluting the stock ownership or voting rights of persons seeking to cause such removal. The Board is not aware of any attempt, or contemplated attempt, to acquire control of the Company, and this proposal is not being presented with the intent that it be utilized as a type of anti- takeover device.

Stockholders should recognize that, as a result of this proposal, they will own a smaller percentage of shares relative to the total authorized shares of the Company, than they presently own, and will be diluted as a result of any issuances contemplated by the Company in the future.

The proposed amendment to the Amended and Restated Certificate of Incorporation to increase the authorized Common Stock is set forth in Appendix B.

Except as described below, there are currently no plans, arrangements, commitments or understandings for the issuance of the additional shares of Common Stock which are proposed to be authorized.

## September 2005 Private Placement

On September 15, 2005, the Company entered into a securities purchase agreement (the "September 2005 Purchase Agreement") with certain purchasers (the "September 2005 Purchasers"), pursuant to which the Company issued and sold \$22,276,250 principal amount of amortizing convertible debentures (the "September 2005 Debentures"), for a cash purchase price of \$17,750,000, which was a 20.3187% discount to the principal amount of the September 2005 Debentures. Upon issuance, the September 2005 Debentures had a maturity date of three years from the closing date of September 15, 2005, did not bear interest, and were to begin amortizing 180 days after closing with 1/30th of the principal amount due monthly over thirty months in cash or stock. Upon issuance, the September 2005 Debentures were convertible into 9,685,326 shares of Common Stock at an initial conversion price of \$2.30 per share. Pursuant to the September 2005 Purchase Agreement, the Company also issued the September 2005 Purchasers warrants (the "September 2005 Warrants") to purchase 4,842,663 shares of Common Stock at an initial exercise price of \$2.53 per share. Upon issuance, the September 2005 Warrants had a term of five years.

Pursuant to and upon the satisfaction of certain conditions set forth in the September 2005 Purchase Agreement, the Company granted the September 2005 Purchasers an option (the "Additional Investment Option") to purchase up to \$11,138,125 principal amount of additional amortizing convertible debentures for a cash purchase price of up to \$8,875,000, for a period of six months following the earlier of the effective date of the registration statement for the shares of Common Stock underlying the September 2005 Debentures and September 2005 Warrants, or 12 months from the date of issuance of the Additional Investment Option.

Each September 2005 Purchaser agreed to contractually restrict its ability to convert the September 2005 Debentures, and exercise the September 2005 Warrants, such that the number of shares of the Company's Common Stock held by it and its affiliates after such conversion or exercise does not exceed 4.99% of the Company's Common Stock outstanding immediately after giving effect to such conversion or exercise.

#### September 2006 Private Placement

On September 6, 2006, the Company entered into a securities purchase agreement, dated August 30, 2006 (the "August 2006 Purchase Agreement") with the September 2005 Purchasers exercising the Additional Investment Option (the "September 2005 Purchasers"), pursuant to which the Company issued and sold \$10,981,250 principal amount of amortizing convertible debentures (the "August 2006 Debentures"), for a cash purchase price of \$8,750,000, which was a 20.3187% discount to the principal amount of the August 2006 Debentures. Upon issuance, the August 2006 Debentures had a maturity date of three years from the closing date of September 6, 2006, did not bear interest, and were to begin amortizing 180 days after closing with 1/30th of the principal amount due monthly over thirty months in cash or stock. Upon issuance, the August 2006 Debentures were convertible into 38,129,340 shares of Common Stock at an initial conversion price of \$0.288 per share. Pursuant to the August 2006 Purchase Agreement, the Company also issued the September 2005 Purchasers exercising the Additional Investment Option warrants (the "August 2006 Warrants") to purchase 4,541,672 shares of Common Stock at an initial exercise price of \$0.3186 per share. Upon issuance, the August 2006 Warrants had a term of five years.

Each September 2005 Purchaser which exercised the Additional Investment Option agreed to contractually restrict its ability to convert the August 2006 Debentures, and exercise the August 2006 Warrants, such that the number of shares of the Company's Common Stock held by it and its affiliates after such conversion or exercise does not exceed 4.99% of the Company's Common Stock outstanding immediately after giving effect to such conversion or exercise.

#### August 2007 Private Placement

On August 31, 2007, the Company entered into a securities purchase agreement (the "August 2007 Purchase Agreement") with certain purchasers (the "August 2007 Purchasers"), pursuant to which the Company issued and sold \$12,250,000 principal amount of amortizing senior secured convertible debentures (the "August 2007 Debentures"), for a cash purchase price of \$10,000,000, which was a 20.3187% discount to the principal amount of the August 2007 Debentures. Upon issuance, the August 2007 Debentures had a maturity date of three years from the closing date of August 31, 2007, did not bear interest, and were to begin amortizing on the earlier of (i) September 1, 2008, or (ii) the first trading day of the month following the effective date of the initial registration statement for the shares of Common Stock underlying the August 2007 Debentures and August 2007 Warrants, but in no event prior to February 1, 2008. Upon issuance, the August 2007 Debentures were convertible into 36,911,765 shares of common stock at an initial conversion price of \$0.34 per share. Pursuant to the August 2007 Purchase Agreement, the Company also issued the August 2007 Purchasers warrants (the "August 2007 Warrants") to purchase 36,911,765 shares of Common Stock at an initial exercise price of \$0.38 per share. Upon issuance, the August 2007 Warrants had a term of five years.

In connection with the August 2007 Purchase Agreement, the Company entered into a security agreement (the "August 2007 Security Agreement") with the August 2007 Purchasers, pursuant to which the Company granted the August 2007 Purchasers a senior security interest and lien on all of the Company's assets. The security interest granted under the August 2007 Security Agreement also secured the obligations to the September 2005 Purchasers under the September 2005 Debentures and the August 2006 Debentures.

Each August 2007 Purchaser agreed to contractually restrict its ability to convert the August 2007 Debentures, and exercise the August 2007 Warrants, such that the number of shares of the Company's Common Stock held by it and its affiliates after such conversion or exercise does not exceed 4.99% of the Company's Common Stock outstanding immediately after giving effect to such conversion or exercise.

#### March 2008 Private Placement

On March 31, 2008, the Company entered into a securities purchase agreement (the "March 2008 Purchase Agreement") with certain purchasers (the "March 2008 Purchasers", and together with the September 2005 Purchasers and the August 2007 Purchasers, the "Purchasers"), pursuant to which the Company issued and sold \$3,823,145 principal amount of amortizing senior secured convertible debentures (the "March 2008 Debentures", and together with the September 2005 Debentures, the August 2006 Debentures, and the August 2007 Debentures, the "Debentures") for a purchase price of \$3,046,331 (including cash of \$2,355,331 and in-kind payments and refinancing of bridge debt incurred in anticipation of the March 2008 Purchase Agreement of an aggregate of \$691,000), which was a 20.3187% discount to the principal amount of the March 2008 Debentures. Upon issuance, the March 2008 Debentures had a maturity date of one year from the closing date of March 31, 2008, did not bear interest, and were to begin amortizing on October 1, 2008. Upon issuance, the March 2008 Debentures were convertible into 25,487,636 shares of Common Stock at an initial conversion price of \$0.15 per share. The Company also issued the March 2008 Purchasers warrants (the "March 2008 Warrants") and together with the September 2005 Warrants, the August 2006 Warrants, and the August 2007 Warrants, the "Warrants") to purchase 25,487,636 shares of Common Stock at an initial exercise price of \$0.165. Upon issuance, the March 2008 Warrants had a term of five years.

In connection with the March 2008 Purchase Agreement, the Company entered into a security agreement (the "March 2008 Security Agreement") with the March 2008 Purchasers, pursuant to which the Company granted the March 2008 Purchasers a senior security interest and lien on all of the Company's assets. The security interest granted under the March 2008 Security Agreement is pari passu with the security interest held by the September 2005 Purchasers and the August 2007 Purchasers.

Each March 2008 Purchaser agreed to contractually restrict its ability to convert the March 2008 Debentures, and exercise the March 2008 Warrants, such that the number of shares of the Company's Common Stock held by it and its affiliates after such conversion or exercise does not exceed 4.99% of the Company's Common Stock outstanding immediately after giving effect to such conversion or exercise.

In connection with the closing under the March 2008 Purchase Agreement, the conversion price of the September 2005 Debentures, the August 2006 Debentures, and the August 2007 Debentures, was reduced to \$0.15, and the exercise price of the September 2005 Warrants, the August 2006 Warrants, and the August 2007 Warrants, was reduced to \$0.165.

June 2009 Consent, Waiver, Amendment and Exchange Agreement

On July 29, 2009, the Company entered into a consent, waiver, amendment and exchange agreement (the "Consent and Waiver") with the Purchasers. Pursuant to the Consent and Waiver:

- The Company agreed to issue to each Purchaser in exchange for such Purchaser's Debenture an amended and restated Debenture (the "Amended and Restated Debentures") in a principal amount equal to the principal amount of such Purchaser's Debenture times 1.35 minus any interest paid thereon.
- The conversion price under the Amended and Restated Debentures was reduced to \$0.10, subject to further adjustment as provided therein (including for stock splits, stock dividends, and certain subsequent equity sales).
  - The maturity date under the Amended and Restated Debentures was extended until December 31, 2010.
- The Amended and Restated Debentures bear interest at the rate of 12% per annum, which shall accrete to, and increase the principal amount payable upon maturity.

- The Amended and Restated Debentures will begin to amortize on September 25, 2009 at a rate of 6.25% of the outstanding principal amount per month, valued at the lesser of the then conversion price and 90% of the average volume weighted average price for the ten prior trading days.
- The Company agreed to issue to each Purchaser in exchange for such Purchaser's Warrant an amended and restated Warrant (the "Amended and Restated Warrants").
- The exercise price under the Amended and Restated Warrants was reduced to \$0.10 subject to further adjustment as provided therein (including for stock splits, stock dividends, and certain subsequent equity sales).
  - The termination date under the Amended and Restated Warrants was extended by June 30, 2014.
- Each Purchaser agreed not to convert more than 20% of such Purchaser's outstanding principal amount of Amended and Restated Debenture in any month during the period from September 1, 2009 through January 31, 2010, provided, however, that this limitation will terminate if (i) (a) the volume weighted average price of the Company's common stock for each of 5 consecutive trading days is greater than \$0.15 per share and (b) the trading volume on such days exceeds 7,500,000 shares per trading day, or (ii) (a) the volume weighted average price for any one trading day is greater than \$0.20 per share and (b) the trading volume on such day exceeds 10,000,000 shares.
- The Company agreed to hold a stockholders' meeting to seek approval of and amendment to the Company's Amended and Restated Certificate of Incorporation to increase the number of authorized shares of Common Stock by 1,250,000,000 shares (the "Authorized Share Approval"). If the Company does not receive the Authorized Share Approval by September 25, 2009, the Company shall pay to the Purchasers, monthly commencing on September 25, 2009, until the Authorized Share Approval is received, liquidated damages equal to 5% of the purchase price of the Debentures.

- The Company agreed to seek shareholder approval for an increase in the number of shares available for issuance under the 2005 Stock Plan by 100,000,000 shares.
- The Purchasers agreed to waive any adjustment to the conversion price of the Debentures and exercise price of the Warrants that would result from the reduction of the conversion price of certain securities of the Company pursuant to the Stipulation of Settlement, dated March 11, 2009, between the Company and Alpha Capital.

Shares of Common Stock issuable upon conversion of the Amended and Restated Debentures and exercise of the Amended and Restated Warrants

The following tables summarize the number of shares of Common Stock issuable upon conversion of the Amended and Restated Debentures and exercise of the Amended and Restated Warrants as of July 29, 2009.

#### Amended and Restated Debentures

Amended and Restated Debentures	Re Pri am	nended and stated ncipal count standing	Con		Number of shares of underlying Common Stock	Prir Am	ginal ncipal ount standing	Original amount of shares of Common stock	Additional amount of common stock
Amended and Restated Debentures issued in exchange for September 2005 Debentures	\$	121,421	\$	0.10	1,214,213	\$	89,942	294,301	919,911
Amended and Restated Debentures issued in exchange for August 2006 Debentures	\$	2,504,082	\$	0.10	25,040,817	\$	1,854,875	8,815,492	16,225,326
Amended and Restated Debentures issued in exchange for August 2007 Debentures	\$	8,949,440	\$	0.10	89,494,396	\$	6,629,214	41,662,206	47,832,190
Amended and Restated Debentures issued in exchange for March 2008 Debentures	\$	5,600,988	\$	0.10	56,009,880	\$	4,148,880	27,659,200	28,350,680

Total	\$ 17,175,931 \$	0.10	171 759 306	\$ 12 722 9110	78,431,199	93 328 107
1 Otal	$\psi$ 1/,1/2,/21 $\psi$	0.10	1/1,/37,300	$\psi 12,122,7110$	10,731,177	75,520,107

## Amended and Restated Warrants

Amended and Restated Warrants	Exercise	price	Number of shares of underlying Common Stock (REPORTED)
Amended and Restated Warrants issued in exchange for September 2005 Warrants	\$	0.10	25,622,331
Amended and Restated Warrants issued in exchange for August 2006			
Warrants	\$	0.10	39,342,351
Amended and Restated Warrants issued in exchange for August 2007			
Warrants	\$	0.10	95,993,607
Amended and Restated Warrants issued in exchange for March 2008 Warrants	\$	0.10	44,292,996
Total	\$	0.10	205,251,285
16			

## Vote Required

Approval of the proposal for the amendment to the Company's Amended and Restated Certificate of Incorporation to increase the number of authorized shares of Common Stock requires the affirmative vote of the holders of a majority of the outstanding shares of our Common Stock. Abstentions and broker non-votes will each be counted as present for purposes of determining the presence of a quorum but will have the same effect as a negative vote on this proposal. If there are not sufficient votes to approve this proposal at the time of the meeting, the meeting may be adjourned in order to permit further solicitation of proxies by the Board of Directors. However, no proxy voted against this proposal will be voted in favor of an adjournment or postponement of the meeting to solicit additional votes in favor of this proposal.

#### **Board Recommendation**

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" APPROVAL OF AN AMENDMENT TO THE COMPANY'S AMENDED AND RESTATED CERTIFICATE OF INCORPORATION TO INCREASE THE COMPANY'S AUTHORIZED SHARES OF COMMON STOCK.

Management's Discussion and Analysis of Financial Condition and Results of Operations for the Quarter Ended March 31, 2009

Certain statements in this proxy statement that are not historical in fact constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 (PSLRA). The PSLRA provides certain "safe harbor" provisions for forward-looking statements. All forward-looking statements made in this proxy statement are made pursuant to the PSLRA. Words such as, but not limited to, "believe," "expect," "anticipate," "estimate," "intend," "plan," similar expressions are intended to identify forward-looking statements. Such forward-looking statements involve known and unknown risks, uncertainties and other factors based on the Company's estimates and expectations concerning future events that may cause the actual results of the Company to be materially different from historical results or from any results expressed or implied by such forward-looking statements. These risks and uncertainties, as well as the Company's critical accounting policies, are discussed in more detail under "Management's Discussion and Analysis—Critical Accounting Policies" and in periodic filings with the Securities and Exchange Commission. The Company undertakes no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise.

#### **OVERVIEW**

The following discussion should be read in conjunction with the financial statements and notes thereto included in this Proxy Statement.

We are a biotechnology company focused on developing and commercializing human stem cell technology in the emerging fields of regenerative medicine and stem cell therapy. Principal activities to date have included obtaining financing, securing operating facilities, and conducting research and development. We have no therapeutic products currently available for sale and do not expect to have any therapeutic products commercially available for sale for a period of years, if at all. These factors indicate that our ability to continue research and development activities is dependent upon the ability of management to obtain additional financing as required.

#### CRITICAL ACCOUNTING POLICIES

Deferred Issuance Cost—Payments, either in cash or share-based payments, made in connection with the sale of debentures are recorded as deferred debt issuance costs and amortized using the effective interest method over the lives of the related debentures. The weighted average amortization period for deferred debt issuance costs is 36

months.

Fair Value Measurements — For certain financial instruments, including accounts receivable, accounts payable, accrued expenses, interest payable, advances payable and notes payable, the carrying amounts approximate fair value due to their relatively short maturities.

Emerging Issues Task Force ("EITF") No. 00-19 "Accounting for Derivative Financial Instruments Indexed to and Potentially Settled in, a Company's Own Stock" ("EITF 00-19"), provides a criteria for determining whether freestanding contracts that are settled in a company's own stock, including common stock options and warrants, should be designated as either an equity instrument, an asset or as a liability under SFAS No. 133 "Accounting for Derivative Instruments and Hedging Activities." Under the provisions of EITF 00-19, a contract designated as an asset or a liability must be carried at fair value on a company's balance sheet, with any changes in fair value recorded in a company's results of operations. Using the criteria in EITF 00-19, we have determined that our outstanding options and warrants require liability accounting and record the fair values as warrant and option derivatives.

On January 1, 2008, we adopted FAS No. 157, "Fair Value Measurements" ("FAS 157"). FAS 157 defines fair value, and establishes a three-level valuation hierarchy for disclosures of fair value measurement that enhances disclosure requirements for fair value measures. The carrying amounts reported in the consolidated balance sheets for receivables and current liabilities each qualify as financial instruments and are a reasonable estimate of their fair values because of the short period of time between the origination of such instruments and their expected realization and their current market rate of interest. The three levels of valuation hierarchy are defined as follows:

- Level 1 inputs to the valuation methodology are quoted prices for identical assets or liabilities in active markets.
- Level 2 inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.
- Level 3 inputs to the valuation methodology are unobservable and significant to the fair value measurement.

FAS 133, "Accounting for Derivative Instruments and Hedging Activities" requires bifurcation of embedded derivative instruments and measurement of fair value for accounting purposes. In addition, FAS 155, "Accounting for Certain Hybrid Financial Instruments" requires measurement of fair values of hybrid financial instruments for accounting purposes. We applied the accounting prescribed in FAS 133 to account for its 2005 Convertible Debenture. For practicality in the valuation of the debentures and for ease of presentation, we applied the accounting prescribed in FAS 155 to account for the 2006, 2007, February 2008, and April 2008 Convertible Debentures.

In determining the appropriate fair value of the debentures, we used Level 2 inputs for our valuation methodology. For the periods from January 1, 2008 through March 31, 2008, we applied the Black-Scholes models, Binomial Option Pricing models, Standard Put Option Binomial models and the net present value of certain penalty amounts to value the debentures and their embedded derivatives. At December 31, 2008, to achieve greater cost efficiencies, we changed our application of the Income Approach as defined under paragraph 18 of FAS 157, by applying the Black-Scholes option pricing model in valuing all debentures and their embedded derivatives. This change did not materially impact the results of our valuations of debentures and embedded derivatives. The impact of the change in the application of the Income Approach was approximately 1.4% of the fair value of our debentures and their embedded derivatives. FAS 157, paragraph 20 states that the disclosure provisions of Statement of Financial Accounting Standards No. 154 Accounting Changes and Error Corrections ("FAS 154") for a change in accounting estimate are not required for revisions resulting from a change in a valuation technique or its application.

Derivative liabilities are adjusted to reflect fair value at each period end, with any increase or decrease in the fair value being recorded in results of operations as Adjustments to Fair Value of Derivatives. The effects of interactions between embedded derivatives are calculated and accounted for in arriving at the overall fair value of the financial instruments. In addition, the fair values of freestanding derivative instruments such as warrant and option derivatives are valued using the Black-Scholes model.

Revenue Recognition— Our revenues are generated from license and research agreements with collaborators. Licensing revenue is recognized on a straight-line basis over the shorter of the life of the license or the estimated economic life of the patents related to the license. Deferred revenue represents the portion of the license and other payments received that has not been earned. Costs associated with the license revenue are deferred and recognized over the same term as the revenue. Reimbursements of research expense pursuant to grants are recorded in the period during which collection of the reimbursement becomes assured, because the reimbursements are subject to approval.

Stock Based Compensation— Effective January 1, 2006, we adopted the fair value recognition provisions of FAS 123(R), using the modified-prospective transition method. Under this method, stock-based compensation expense is recognized in the consolidated financial statements for stock options granted, modified or settled after the adoption date. In accordance with FAS 123(R), the unamortized portion of options granted prior to the adoption date is recognized into earnings after adoption. Results for prior periods have not been restated, as provided for under the modified-prospective method.

Under FAS 123(R), stock-based compensation expense recognized is based on the value of the portion of share-based payment awards that are ultimately expected to vest during the period. Based on this, our stock-based compensation is reduced for estimated forfeitures at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

#### **Recent Accounting Pronouncements**

In December 2007, the FASB issued SFAS No. 141 (Revised 2007), "Business Combinations ("SFAS 141R")." SFAS 141R changes how a reporting enterprise accounts for the acquisition of a business. SFAS 141R requires an acquiring entity to recognize all the assets acquired and liabilities assumed in a transaction at the acquisition-date fair value, with limited exceptions, and applies to a wider range of transactions or events. SFAS 141R is effective for fiscal years beginning on or after December 15, 2008 and early adoption and retrospective application is prohibited. We believe adopting SFAS 141R will significantly impact our financial statements for any business combination completed after December 31, 2008.

In December 2007, the FASB issued FAS No. 160, "Noncontrolling Interests in Consolidated Financial Statements" ("SFAS 160"), which is an amendment of Accounting Research Bulletin ("ARB") No. 51. This statement clarifies that a noncontrolling interest in a subsidiary is an ownership interest in the consolidated entity that should be reported as equity in the consolidated financial statements. This statement changes the way the consolidated income statement is presented, thus requiring consolidated net income to be reported at amounts that include the amounts attributable to both parent and the noncontrolling interest. This statement is effective for the fiscal years, and interim periods within those fiscal years, beginning on or after December 15, 2008. Based on current conditions, we do not expect the adoption of SFAS 160 to have a significant impact on our results of operations or financial position.

In March 2008, the FASB issued SFAS No. 161, "Disclosures about Derivative Instruments and Hedging Activities" ("SFAS 161"). SFAS 161 is intended to improve financial reporting of derivative instruments and hedging activities by requiring enhanced disclosures to enable financial statement users to better understand the effects of derivatives and hedging on an entity's financial position, financial performance and cash flows. The provisions of SFAS 161 are effective for interim periods and fiscal years beginning after November 15, 2008, with early adoption encouraged. The adoption of SFAS 161 did not have a material impact on our consolidated results of operations or consolidated financial position.

On June 16, 2008, the FASB issued FSP No. EITF 03-6-1 ("FSP EITF 03-6-1"), "Determining Whether Instruments Granted in Share-Based Payment Transactions Are Participating Securities," to address the question of whether instruments granted in share-based payment transactions are participating securities prior to vesting. FSP EITF 03-6-1 indicates that unvested share-based payment awards that contain rights to dividend payments should be included in earnings per share calculations. The guidance will be effective for fiscal years beginning after December 15, 2008. The adoption of FSP EITF 03-6-1 did not have an impact on the consolidated results of operations or consolidated financial position.

In June 2008, the FASB issued Emerging Issues Task Force Issue 07-5 "Determining whether an Instrument (or Embedded Feature) is indexed to an Entity's Own Stock" ("EITF No. 07-5"). This Issue is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. Early application is not permitted. Paragraph 11(a) of Statement of Financial Accounting Standard No 133 "Accounting for Derivatives and Hedging Activities" ("FAS 133") specifies that a contract that would otherwise meet the definition of a derivative but is both (a) indexed to the Company's own stock and (b) classified in stockholders' equity in the statement of financial position would not be considered a derivative financial instrument. EITF No.07-5 provides a new two-step model to be applied in determining whether a financial instrument or an embedded feature is indexed to an issuer's own stock and thus able to qualify for the FAS 133 paragraph 11(a) scope exception. This statement did not have a material impact on the financial statements.

In April 2008, the FASB issued FASB Staff Position No. FAS 142-3 "Determination of the useful life of Intangible Assets", ("FSP FAS 142-3") which amends the factors a company should consider when developing renewal assumptions used to determine the useful life of an intangible asset under FAS 142. This Issue is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. FAS 142 requires companies to consider whether renewal can be completed without substantial cost or material modification of the existing terms and conditions associated with the asset. FSP FAS 142-3 replaces the previous useful life criteria with a new requirement—that an entity consider its own historical experience in renewing similar arrangements. If historical experience does not exist then the Company would consider market participant assumptions regarding renewal including 1) highest and best use of the asset by a market participant, and 2) adjustments for other entity-specific factors included in FAS 142. This statement did not have a material impact on the financial statements.

On May 9, 2008, the FASB issued FASB Staff Position No. APB 14-1 ("FSP APB 14-1"), "Accounting for Convertible Debt Instruments That May Be Settled in Cash upon Conversion (Including Partial Cash Settlement)." FSP APB 14-1 clarifies that convertible debt instruments that may be settled in cash upon conversion (including partial cash settlement) are not addressed by paragraph 12 of APB Opinion No. 14, "Accounting for Convertible Debt and Debt Issued with Stock Purchase Warrants." Additionally, FSP APB 14-1 specifies that issuers of such instruments should separately account for the liability and equity components in a manner that will reflect the entity's nonconvertible debt borrowing rate when interest cost is recognized in subsequent periods. FSP APB14-1 is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. This statement did not have a material impact on the financial statements.

In June 2008, FASB issued EITF 08-4, "Transition Guidance for Conforming Changes to Issue No. 98-5" ("EITF 08-4"). The objective of EITF 08-4 is to provide transition guidance for conforming changes made to EITF 98-5,

"Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustable Conversion Ratios", that result from EITF 00-27 "Application of Issue No. 98-5 to Certain Convertible Instruments", and FAS 150, "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity". This Issue is effective for financial statements issued for fiscal years ending after December 15, 2008. Early application is permitted. This statement did not have a material impact on the financial statements.

In April 2009, the FASB issued FSP FAS 157-4, "Determining Fair Value When the Volume and Level of Activity for the Asset or Liability Have Significantly Decreased and Identifying Transactions That Are Not Orderly" ("FSP FAS 157-4"). FSP FAS 157-4 provides additional guidance for estimating fair value measurements in accordance with FASB Statement No. 157 when there is not an active market or where the price inputs being used represent distressed sales. FSP FAS 157-4 provides additional guidance on the major categories for which equity and debt securities disclosures are to be presented and amends the disclosure requirements of FASB Statement No. 157 to require disclosure in interim and annual periods of the inputs and valuation technique(s) used to measure fair value and a discussion of changes in valuation techniques and related inputs, if any, during the period. FSP FAS 157-4 shall be applied prospectively and is effective for interim and annual reporting periods ending after June 15, 2009, with early adoption permitted for periods ending after March 15, 2009. An entity early adopting this FSP must also early adopt FSP No. FAS 115-2 and FAS 124-2, Recognition and Presentation of Other-Than-Temporary Impairment ("FSP FAS 115-2 and FAS 124-2"). This statement did not have a material impact on the financial statements.

In January 2009, the FASB issued FSP EITF 99-20-1, "Amendments to the Impairment Guidance of EITF Issue No. 99-20, and EITF Issue No. 99-20, Recognition of Interest Income and Impairment on Purchased and Retained Beneficial Interests in Securitized Financial Assets" ("FSP EITF 99-20-1"). FSP EITF 99-20-1 changes the impairment model included within EITF 99-20 to be more consistent with the impairment model of SFAS No. 115. FSP EITF 99-20-1 achieves this by amending the impairment model in EITF 99-20 to remove its exclusive reliance on "market participant" estimates of future cash flows used in determining fair value. Changing the cash flows used to analyze other-than-temporary impairment from the "market participant" view to a holder's estimate of whether there has been a "probable" adverse change in estimated cash flows allows companies to apply reasonable judgment in assessing whether an other-than-temporary impairment has occurred. This statement did not have a material impact on the financial statements.

In April 2009, the FASB issued FSP FAS 115-2 and FAS 124-2. This FSP amends SFAS 115, "Accounting for Certain Investments in Debt and Equity Securities," SFAS 124, "Accounting for Certain Investments Held by Not-for-Profit Organizations," and EITF Issue No. 99-20, "Recognition of Interest Income and Impairment on Purchased Beneficial Interests and Beneficial Interests That Continue to Be Held by a Transferor in Securitized Financial Assets," to make the other-than-temporary impairments guidance more operational and to improve the presentation of other-than-temporary impairments in the financial statements. This FSP will replace the existing requirement that the entity's management assert it has both the intent and ability to hold an impaired debt security until recovery with a requirement that management assert it does not have the intent to sell the security, and it is more likely than not it will not have to sell the security before recovery of its cost basis. This FSP provides increased disclosure about the credit and noncredit components of impaired debt securities that are not expected to be sold and also requires increased and more frequent disclosures regarding expected cash flows, credit losses, and an aging of securities with unrealized losses. Although this FSP does not result in a change in the carrying amount of debt securities, it does require that the portion of an other-than-temporary impairment not related to a credit loss for a held-to-maturity security be recognized in a new category of other comprehensive income and be amortized over the remaining life of the debt security as an increase in the carrying value of the security. This FSP shall be effective for interim and annual periods ending after June 15, 2009, with early adoption permitted for periods ending after March 15, 2009. An entity may early adopt this FSP only if it also elects to early adopt FSP FAS 157-4. Also, if an entity elects to early adopt either FSP FAS 157-4 or FSP FAS 107-1 and APB 28-1, the entity also is required to early adopt this FSP. The adoption of FSP FAS 115-2 and FAS 124-2 did not have a material impact on our consolidated financial statements.

In April 2009, the FASB issued FSP No. FAS 107-1 and APB 28-1, "Interim Disclosures about Fair Value of Financial Instruments" ("FSP FAS 107-1 and APB 28-1"). FSP FAS 107-1 and APB 28-1 requires companies to disclose in interim financial statements the fair value of financial instruments within the scope of FASB Statement No. 107, Disclosures about Fair Value of Financial Instruments. However, companies are not required to provide in interim periods the disclosures about the concentration of credit risk of all financial instruments that are currently required in annual financial statements. The fair-value information disclosed in the footnotes must be presented together with the related carrying amount, making it clear whether the fair value and carrying amount represent assets or liabilities and how the carrying amount relates to what is reported in the balance sheet. FSP FAS 107-1 and APB 28-1 also requires that companies disclose the method or methods and significant assumptions used to estimate the fair value of financial instruments and a discussion of changes, if any, in the method or methods and significant assumptions during the period. The FSP shall be applied prospectively and is effective for interim and annual periods ending after June 15, 2009, with early adoption permitted for periods ending after March 15, 2009. An entity early adopting FSP FAS 107-1 and APB 28-1 must also early adopt FSP FAS 157-4 as well as FSP FAS 115-2 and FAS 124-2. We will adopt the disclosure requirements of this pronouncement for the quarter ended June 30, 2009, in conjunction with the adoption of FSP FAS 157-4, FSP FAS 115-2 and FAS 124-2.

In May 2009, the FASB issued SFAS No. 165, "Subsequent Events" ("SFAS 165"). SFAS 165 sets forth the period after the balance sheet date during which management of a reporting entity should evaluate events or transactions that may occur for potential recognition or disclosure in the financial statements, the circumstances under which an entity

should recognize events or transactions occurring after the balance sheet date in its financial statements, and the disclosures that an entity should make about events or transactions that occurred after the balance sheet date. SFAS 165 will be effective for interim or annual period ending after June 15, 2009 and will be applied prospectively. The Company will adopt the requirements of this pronouncement for the quarter ended June 30, 2009. We do not anticipate the adoption of SFAS 165 will have an impact on our consolidated results of operations or consolidated financial position.

In June 2009, the FASB issued SFAS No. 166 "Accounting for Transfers of Financial Assets" ("SFAS 166"). Statement 166 is a revision to FASB Statement No. 140, Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities, and will require more information about transfers of financial assets, including securitization transactions, and where entities have continuing exposure to the risks related to transferred financial assets. It eliminates the concept of a "qualifying special-purpose entity," changes the requirements for derecognizing financial assets, and requires additional disclosures. SFAS 166 enhances information reported to users of financial statements by providing greater transparency about transfers of financial assets and an entity's continuing involvement in transferred financial assets.

SFAS 166 will be effective at the start of a reporting entity's first fiscal year beginning after November 15, 2009. Early application is not permitted. We are currently evaluating the impact of adoption of SFAS 166 on the accounting for our convertible notes and related warrant liabilities.

In June 2009, the FASB issued SFAS No. 167 "Amendments to FASB Interpretation No. 46(R)" ("SFAS 167"). Statement 167 is a revision to FASB Interpretation No. 46 (Revised December 2003), Consolidation of Variable Interest Entities, and changes how a reporting entity determines when an entity that is insufficiently capitalized or is not controlled through voting (or similar rights) should be consolidated. The determination of whether a reporting entity is required to consolidate another entity is based on, among other things, the other entity's purpose and design and the reporting entity's ability to direct the activities of the other entity that most significantly impact the other entity's economic performance. SFAS 167 will require a reporting entity to provide additional disclosures about its involvement with variable interest entities and any significant changes in risk exposure due to that involvement. A reporting entity will be required to disclose how its involvement with a variable interest entity affects the reporting entity's financial statements. SFAS 167 will be effective at the start of a reporting entity's first fiscal year beginning after November 15, 2009. Early application is not permitted. We are currently evaluating the impact, if any, of adoption of SFAS 167 on our financial statements.

In June 2009, the FASB issued SFAS No. 168 "The FASB Accounting Standards Codification and the Hierarchy of Generally Accepted Accounting Principles – A Replacement of FASB Statement No. 162" ("SFAS 168"). Statement 168 establishes the FASB Accounting Standards CodificationTM (Codification) as the single source of authoritative U.S. generally accepted accounting principles (U.S. GAAP) recognized by the FASB to be applied by nongovernmental entities. Rules and interpretive releases of the SEC under authority of federal securities laws are also sources of authoritative U.S. GAAP for SEC registrants. SFAS 168 and the Codification are effective for financial statements issued for interim and annual periods ending after September 15, 2009. When effective, the Codification will supersede all existing non-SEC accounting and reporting standards. All other nongrandfathered non-SEC accounting literature not included in the Codification will become nonauthoritative. Following SFAS 168, the FASB will not issue new standards in the form of Statements, FASB Staff Positions, or Emerging Issues Task Force Abstracts. Instead, the FASB will issue Accounting Standards Updates, which will serve only to: (a) update the Codification; (b) provide background information about the guidance; and (c) provide the bases for conclusions on the change(s) in the Codification. The adoption of SFAS 168 will not have an impact on our consolidated financial statements.

#### **RESULTS OF OPERATIONS**

Comparison of Three Months March 31, 2009 and 2008

	T	Three months ended March 31, Th 2009		aree months end		
			% of			% of
		Amount	Revenue		Amount	Revenue
REVENUE	\$	293,976	100.0%	\$	124,343	100.0%
COST OF REVENUE		138,752	47.2%		190,728	64.9%
GROSS PROFIT		155,224	52.8%		(66,385)	-22.6%
RESEARCH AND DEVELOPMENT EXPENSES						
AND GRANT						
REIMBURSEMENTS		299,767	102.0%		3,862,383	1313.8%
GENERAL AND						
ADMINSTRATIVE EXPENSES		747,078	254.1%		1,725,822	587.1%
LOSS ON SETTLEMENT		4,793,949	1630.7%		-	0.0%
OTHER INCOME (EXPENSE)		(13,314,306)	-4529.0%		(3,865,069)	-1314.8%
NET LOSS	\$	(18,999,876)	-6463.1%	\$	(9,519,659)	-3238.2%

#### Revenues

Revenues for the three months ended March 31, 2009 and 2008 were \$293,976 and \$124,343, respectively. These amounts relate primarily to license fees and royalties collected that are being amortized over the period of the license granted, and are therefore typically consistent between periods. The increase in revenue during the three months ended March 31, 2009, was due to more new licenses being granted as compared to the three months ended March 31, 2008.

Research and Development Expenses and Grant Reimbursements

Research and development expenses ("R&D") for the three months ended March 31, 2009 and 2008 were \$436,607 and \$3,967,552, respectively, a decrease of \$3,530,945. R&D consists mainly of facility costs, payroll and payroll related expenses, research supplies and costs incurred in connection with specific research grants, and for scientific research. The decline in R&D expenditures during the three months ended March 31, 2009 as compared to the same period in 2008 is primarily due to the fact that we closed our Charlestown, Massachusetts and Alameda, California facilities at the end of May 2008.

Our research and development expenses consist primarily of costs associated with basic and pre-clinical research exclusively in the field of human stem cell therapies and regenerative medicine, with focus on development of our technologies in cellular reprogramming, reduced complexity applications, and stem cell differentiation. These expenses represent both pre-clinical development costs and costs associated with non-clinical support activities such as quality control and regulatory processes. The cost of our research and development personnel is the most significant category of expense; however, we also incur expenses with third parties, including license agreements, sponsored research programs and consulting expenses.

We do not segregate research and development costs by project because our research is focused exclusively on human stem cell therapies as a unitary field of study. Although we have three principal areas of focus for our research, these areas are completely intertwined and have not yet matured to the point where they are separate and distinct projects. The intellectual property, scientists and other resources dedicated to these efforts are not separately allocated to individual projects, but rather are conducting our research on an integrated basis.

We expect that research and development expenses will continue to increase in the foreseeable future as we add personnel, expand our pre-clinical research, begin clinical trial activities, and increase our regulatory compliance capabilities. The amount of these increases is difficult to predict due to the uncertainty inherent in the timing and extent of progress in our research programs, and initiation of clinical trials. In addition, the results from our basic research and pre-clinical trials, as well as the results of trials of similar therapeutics under development by others, will influence the number, size and duration of planned and unplanned trials. As our research efforts mature, we will continue to review the direction of our research based on an assessment of the value of possible commercial applications emerging from these efforts. Based on this continuing review, we expect to establish discrete research programs and evaluate the cost and potential for cash inflows from commercializing products, partnering with others in the biotechnology or pharmaceutical industry, or licensing the technologies associated with these programs to third parties.

We believe that it is not possible at this stage to provide a meaningful estimate of the total cost to complete our ongoing projects and bring any proposed products to market. The use of human embryonic stem cells as a therapy is an emerging area of medicine, and it is not known what clinical trials will be required by the FDA in order to gain marketing approval. Costs to complete could vary substantially depending upon the projects selected for development, the number of clinical trials required and the number of patients needed for each study. It is possible that the completion of these studies could be delayed for a variety of reasons, including difficulties in enrolling patients, delays in manufacturing, incomplete or inconsistent data from the pre-clinical or clinical trials, and difficulties evaluating the trial results. Any delay in completion of a trial would increase the cost of that trial, which would harm our results of operations. Due to these uncertainties, we cannot reasonably estimate the size, nature nor timing of the costs to complete, or the amount or timing of the net cash inflows from our current activities. Until we obtain further relevant pre-clinical and clinical data, we will not be able to estimate our future expenses related to these programs or when, if ever, and to what extent we will receive cash inflows from resulting products.

Grant reimbursements for the three months ended March 31, 2009 and 2008 were \$136,840 and \$105,169, respectively. The Company received one grant during the three months ended March 31, 2009 and one grant during the three months ended March 31, 2008, both from the National Institutes of Health.

#### General and Administrative Expenses

General and administrative expenses for the three months ended March 31, 2009 and 2008 were \$747,078 and \$1,725,822, respectively, a decrease of \$978,744. This expense decrease was primarily a result of management's efforts to reduce costs and streamline operations during the three months ended March 31, 2009 so that we could move closer to achieving profitability. General and administrative expenses should continue to slightly decrease over the short term as we continue to streamline our operations and reduce our costs until we are able to expand. We expect

that with the successful IND submission of our core technologies and a rebound of the U.S. and world economy will come additional opportunities for growth and capital.

#### Loss on Settlement

Loss on settlement for the three months ended March 31, 2009 and 2008 were \$4,793,949 and \$0, respectively. During the three months ended March 31, 2009, we were ordered by the Circuit Court of the Twelfth Judicial District Court for Sarasosa County, Florida to settle certain past due accounts payable, for previous professional services and other operating expenses incurred, by the issuance of shares of our common stock. During the quarter, we settled \$505,199 in accounts payable through the issuance of 39,380,847 shares of our common stock with a value of \$5,299,148. Accordingly, we recorded a loss on settlement of \$4,793,949 for the three months ended March 31, 2009.

#### Other Income (Loss)

Other income (loss) for the three months ended March 31, 2009 and 2008 were (\$13,314,306) and (\$3,865,069), respectively. The change in other income (loss) in the three months ended March 31, 2009, compared to that of the earlier period, relates primarily to adjustments to fair value of derivatives related to the Convertible Debenture financings, loss on modification of debentures, and default interest charges on all debentures. Interest income was \$1,621, and \$6,849 during the three months ended March 31, 2009 and 2008, respectively. Interest income was lower in the three months ended March 31, 2009 than in the three months ended March 31, 2008 due to the lower cash balances held in interest-bearing deposits during the periods. Interest expense was \$582,821 and \$4,206,616 for the three months ended March 31, 2009 and 2008, respectively, which represents a decrease of \$3,623,795. The decrease in interest expense in the three months ended March 31, 2009, compared to the earlier period relates primarily to amortization of all remaining debt discounts and deferred financing costs being recorded during the third quarter of 2008 for all debentures upon their default on August 6, 2008. Therefore, no additional interest expense arose in 2009 from this amortization. Interest expense during the three months ended March 31, 2009 relates primarily to debenture default interest.

The gain (loss) on the fair value of derivatives was (\$10,841,612) and \$1,020,271, for the three months ended March 31, 2009 and 2008, respectively. The increase in our share price contributed most significantly to the loss on the fair value of derivatives during the three months ended March 31, 2009. In periods when the share price increases, the derivative securities become more attractive to exercise or in-the-money, and therefore the value of the derivative liabilities increases.

During the three months ended March 31, 2009, we recognized a loss on modification of debentures in the amount of \$1,796,368. This loss arose from a court order that we allow an investor to convert its 2007 and 2008 debenture balances at \$0.02 per share. The change in fair value immediately after the conversion price reduction from immediately before the conversion price reduction gave rise to the loss on modification.

#### Net Loss

Net loss for the three months ended March 31, 2009 and 2008 was \$18,999,876 and \$9,519,659, respectively. The change in loss in the current period is the result of changes to the fair value of derivatives, interest charges related to convertible debentures, a loss on the court order settlement of accounts payable, and loss on modification of debt.

## LIQUIDITY AND CAPITAL RESOURCES

#### Cash Flows

The following table sets forth a summary of our cash flows for the periods indicated below:

	Three months ended March 31,				
		2009		2008	
Net cash used in operating activities	\$	(292,232)	\$	(1,583,755)	
Net cash used in investing activities		(2,170)		(142,588)	
Net cash provided by financing activities		-		1,161,350	
Net decrease in cash and cash equivalents		(294,402)		(564,993)	
Cash and cash equivalents at the end of the period	\$	522,502	\$	601,123	

#### Operating Activities

Our net cash used in operating activities during the three months ended March 31, 2009 and 2008 was \$292,232 and \$1,583,755, respectively. Cash used operating activities decreased during the current period primarily due to a decrease in cash and cash equivalents available for use during the period.

#### Cash Flows from Investing and Financing Activities

Cash used in investing activities during the three months ended March 31, 2009 and 2008 was \$2,170 and \$142,588, respectively. Our cash used in investing activities during the three months ended March 31, 2009 was attributed to payment of a deposit on our leased space in Los Angeles, California. Cash provided by investing activities during the three months ended March 31, 2008 was primarily due to purchases of property and equipment. Cash flows provided by financing activities during the three months ended March 31, 2009 was \$0. During the three months ended March 31, 2008, we made payments of \$18,650 on notes and leases. We also received proceeds of \$550,000 from the issuance of a convertible note payable as well as \$630,000 from the issuance of notes payable during the three months ended March 31, 2008.

We are financing our operations primarily from the following activities:

On December 1, 2008, we formed an international joint venture with CHA Bio & Diostech Co., Ltd. ("CHA"), a leading Korean-based biotechnology company focused on the development of stem cell technologies. CHA has agreed to contribute \$500,000 in working capital for the venture as well as paying the Company an up-front license fee of \$500,000. As of June 15, 2009, CHA has paid the Company the entire \$500,000 towards payment of the up-front license fee.

- · On December 18, 2008, we entered into a license agreement with an Ireland-based investor, Transition Holdings Inc. ("Transition"), for certain of our non-core technology. Under the agreement, Transition agreed to acquire a license to the technology for \$3.5 million in cash. As of June 30, 2009, we have received the entire \$3.5 million in cash under this agreement.
- · On March 30, 2009, we entered into a license agreement with CHA under which we will license our RPE technology, for the treatment of diseases of the eye, to CHA for development and commercialization exclusively in Korea. We are eligible to receive up to a total of \$1.9 million in fees based upon the parties achieving certain milestones, including us making an IND submission to the US FDA to commence clinical trials in humans using the technology. We received an up-front fee under the license in the amount of \$1,100,000. Under the agreement, CHA will incur all of the cost associated with the RPA clinical trials in Korea. The agreement is part of the joint venture between the two companies.
- On March 11, 2009, we entered into a \$5 million credit facility ("Facility") with a life sciences fund. Under the agreement, the proceeds from the Facility must be used exclusively for us to file an investigational new drug ("IND") for our retinal pigment epithelium ("RPE") program, and will allow us to complete both Phase I and Phase II studies in humans. An IND is required to commence clinical trials. Under the terms of the agreement, we may draw down funds, as needed for clinical development of the RPE program, from the investor through the issuance of Series A-1 convertible preferred stock. The preferred stock pays dividends, in kind of preferred stock, at an annual rate of 10%, matures in four years from the initial issuance date, and is convertible into common stock at \$0.75 per share. As of June 30, 2009, we have drawn down approximately \$1,810,000 on this facility.
- On May 13, 2009, the Company entered into another license agreement with CHA under which the Company will license its proprietary "single blastomere technology," which has the potential to generate stable cell lines, including RPE for the treatment of diseases of the eye, for development and commercialization exclusively in Korea. We received an upfront license fee of \$300,000.

To a substantially lesser degree, financing of our operations is provided through grant funding, payments received under license agreements, and interest earned on cash and cash equivalents.

With the exception of 2002, when we sold certain assets of a subsidiary resulting in a gain for the year, we have incurred substantial net losses each year since inception as a result of research and development and general and administrative expenses in support of our operations. We anticipate incurring substantial net losses in the future.

Our cash and cash equivalents are limited. In the short term, we will require substantial additional funding prior to March 31, 2010 in order to maintain our current level of operations. If we are unable to raise additional funding, we will be forced to either substantially scale back our business operations or curtail our business operations entirely.

On a longer term basis, we have no expectation of generating any meaningful revenues from our product candidates for a substantial period of time and will rely on raising funds in capital transactions to finance our research and development programs. Our future cash requirements will depend on many factors, including the pace and scope of our research and development programs, the costs involved in filing, prosecuting and enforcing patents, and other costs associated with commercializing our potential products. We intend to seek additional funding primarily through public or private financing transactions, and, to a lesser degree, new licensing or scientific collaborations, grants from governmental or other institutions, and other related transactions. If we are unable to raise additional funds, we will be forced to either scale back or business efforts or curtail our business activities entirely. We anticipate that our available cash and expected income will be sufficient to finance most of our current activities for at least four months from the date we file these financial statements, although certain of these activities and related personnel may need to be reduced. We cannot assure you that public or private financing or grants will be available on acceptable terms, if at all. Several factors will affect our ability to raise additional funding, including, but not limited to, the volatility of our Common Stock.

Management's Discussion and Analysis of Financial Condition and Results of Operation for the year Ended December 31, 2008

You should read the following discussion of our financial condition and results of operations together with the audited financial statements and the notes to the audited financial statements included in this proxy statement. This discussion contains forward-looking statements that reflect our plans, estimates and beliefs. Our actual results may differ materially from those anticipated in these forward-looking statements.

#### **Executive Level Overview**

We are a biotechnology company focused on developing and commercializing human stem cell technology in the emerging fields of regenerative medicine and stem cell therapy.

#### **Critical Accounting Estimates**

The Company's discussion and analysis of its financial condition and results of operations are based upon the Company's consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires the Company to make certain estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of any contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. The Company regularly reviews its estimates and assumptions, which are based upon historical experience, as well as current economic conditions and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of certain assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates and assumptions.

The Company believes that the following critical accounting policies are affected by significant judgments and estimates used in the preparation of its consolidated financial statements.

Fair Value Measurements — For certain financial instruments, including accounts receivable, accounts payable, accrued expenses, interest payable, advances payable and notes payable, the carrying amounts approximate fair value due to their relatively short maturities.

Emerging Issues Task Force ("EITF") No. 00-19 "Accounting for Derivative Financial Instruments Indexed to and Potentially Settled in, a Company's Own Stock" ("EITF 00-19"), provides a criteria for determining whether freestanding contracts that are settled in a company's own stock, including common stock options and warrants, should be designated as either an equity instrument, an asset or as a liability under FAS No. 133 "Accounting for Derivative Instruments and Hedging Activities." Under the provisions of EITF 00-19, a contract designated as an asset or a liability must be carried at fair value on a company's balance sheet, with any changes in fair value recorded in a company's results of operations. Using the criteria in EITF 00-19, the Company has determined that its outstanding options and warrants require liability accounting and records the fair values as warrant and option derivatives.

On January 1, 2008, the Company adopted FAS No. 157, "Fair Value Measurements" ("FAS 157"). FAS 157 defines fair value and establishes a three-level valuation hierarchy for disclosures of fair value measurement that enhances disclosure requirements for fair value measures. The carrying amounts reported in the consolidated balance sheets for receivables and current liabilities each qualify as financial instruments and are a reasonable estimate of their fair values because of the short period of time between the origination of such instruments and their expected realization and their current market rate of interest. The three levels of valuation hierarchy are defined as follows:

- Level 1 inputs to the valuation methodology are quoted prices for identical assets or liabilities in active markets.
- Level 2 inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.
- Level 3 inputs to the valuation methodology are unobservable and significant to the fair value measurement.

FAS 133, "Accounting for Derivative Instruments and Hedging Activities" requires bifurcation of embedded derivative instruments and measurement of fair value for accounting purposes. In addition, FAS 155, "Accounting for Certain Hybrid Financial Instruments" requires measurement of fair values of hybrid financial instruments for accounting purposes. We applied the accounting prescribed in FAS 133 to account for our 2005 Convertible Debenture. For practicality in the valuation of the debentures and for ease of presentation, we applied the accounting prescribed in FAS 155 to account for the 2006, 2007, February 2008, and April 2008 Convertible Debentures.

In determining the appropriate fair value of the debentures, we used Level 2 inputs for our valuation methodology. For the periods from January 1, 2007 through September 30, 2008, we applied the Black-Scholes models, Binomial Option Pricing models, Standard Put Option Binomial models and the net present value of certain penalty amounts to value the debentures and their embedded derivatives. At December 31, 2008, to achieve greater cost efficiencies, we changed our application of the Income Approach as defined under paragraph 18 of FAS 157, by applying the Black-Scholes option pricing model in valuing all debentures and their embedded derivatives. This change did not materially impact the results of the Company's valuations of its debentures and embedded derivatives. The impact of the change in the application of the Income Approach was approximately 1.4% of the fair value of the Company's debentures and their embedded derivatives. FAS 157, paragraph 20 states that the disclosure provisions of Statement of Financial Accounting Standards No. 154 Accounting Changes and Error Corrections ("FAS 154") for a change in accounting estimate are not required for revisions resulting from a change in a valuation technique or its application.

Derivative liabilities are adjusted to reflect fair value at each period end, with any increase or decrease in the fair value being recorded in results of operations as Adjustments to Fair Value of Derivatives. The effects of interactions between embedded derivatives are calculated and accounted for in arriving at the overall fair value of the financial instruments. In addition, the fair values of freestanding derivative instruments such as warrant and option derivatives are valued using the Black-Scholes model.

Revenue Recognition— Our revenues are generated from license and research agreements with collaborators. Licensing revenue is recognized on a straight-line basis over the shorter of the life of the license or the estimated economic life of the patents related to the license. License fee revenue begins to be recognized in the first full month following the effective date of the license agreement. Deferred revenue represents the portion of the license and other payments received that has not been earned. Costs associated with the license revenue are deferred and recognized over the same term as the revenue. Reimbursements of research expense pursuant to grants are recorded in the period during which collection of the reimbursement becomes assured, because the reimbursements are subject to approval.

Stock Based Compensation— Effective January 1, 2006, we adopted the fair value recognition provisions of FAS 123(R), using the modified-prospective transition method. Under this method, stock-based compensation expense is recognized in the consolidated financial statements for stock options granted, modified or settled after the adoption date. In accordance with FAS 123(R), the unamortized portion of options granted prior to the adoption date is recognized into earnings after adoption. Results for prior periods have not been restated, as provided for under the modified-prospective method.

Under FAS 123(R), stock-based compensation expense recognized is based on the value of the portion of share-based payment awards that are ultimately expected to vest during the period. Based on this, our stock-based compensation is reduced for estimated forfeitures at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

#### **Recent Accounting Pronouncements**

In September 2006, the FASB issued FAS 157 "Fair Value Measurements." This Statement defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles (GAAP), and expands disclosures about fair value measurements. This Statement applies under other accounting pronouncements that require or permit fair value measurements, the Board having previously concluded in those accounting pronouncements that fair value is the relevant measurement attribute. Accordingly, this Statement does not require any new fair value measurements. However, for some entities, the application of this Statement will change current practice. This Statement is effective for financial statements issued for fiscal years beginning after November 15, 2007, and interim periods within those fiscal years. Earlier application is encouraged, provided that the reporting entity has not yet issued financial statements for that fiscal year, including financial statements for an interim period

within that fiscal year. We have adopted FAS 157 beginning January 1, 2008 and do not believe the adoption had a material impact on our financial position, results of operations or cash flows.

In December 2007, the FASB issued SFAS No. 141 (Revised 2007), "Business Combinations." FAS No. 141 (Revised 2007) changes how a reporting enterprise accounts for the acquisition of a business. FAS No. 141 (Revised 2007) requires an acquiring entity to recognize all the assets acquired and liabilities assumed in a transaction at the acquisition-date fair value, with limited exceptions, and applies to a wider range of transactions or events. FAS No. 141 (Revised 2007) is effective for fiscal years beginning on or after December 15, 2008 and early adoption and retrospective application is prohibited. We believe adopting FAS No. 141R will significantly impact our financial statements for any business combination completed after December 31, 2008.

In February 2007, the FASB issued FAS No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities". This Statement permits entities to choose to measure many financial assets and financial liabilities at fair value. Unrealized gains and losses on items for which the fair value option has been elected are reported in earnings. FAS No. 159 is effective as of the beginning of an entity's first fiscal year that begins after November 15, 2007. The Company adopted FAS No. 159 on January 1, 2008. We chose not to elect the option to measure the fair value of eligible financial assets and liabilities.

In June 2007, the FASB issued FASB Staff Position No. EITF 07-3, "Accounting for Nonrefundable Advance Payments for Goods or Services Received for use in Future Research and Development Activities" ("FSP EITF 07-3"), which addresses whether nonrefundable advance payments for goods or services that used or rendered for research and development activities should be expensed when the advance payment is made or when the research and development activity has been performed. Management is currently evaluating the effect of this pronouncement on financial statements.

In December 2007, the FASB issued SFAS No. 160, "Noncontrolling Interests in Consolidated Financial Statements — An Amendment of ARB No. 51" ("SFAS 160"). SFAS 160 amends ARB 51 to establish accounting and reporting standards for the noncontrolling interest in a subsidiary and for the deconsolidation of a subsidiary. It is intended to eliminate the diversity in practice regarding the accounting for transactions between equity and noncontrolling interests by requiring that they be treated as equity transactions. Further, it requires consolidated net income to be reported at amounts that include the amounts attributable to both the parent and the noncontrolling interest. SFAS 160 also establishes a single method of accounting for changes in a parent's ownership interest in a subsidiary that do not result in deconsolidation, requires that a parent recognize a gain or loss in net income when a subsidiary is deconsolidated, requires expanded disclosures in the consolidated financial statements that clearly identify and distinguish between the interests of the parent's owners and the interests of the noncontrolling owners of a subsidiary, among others. SFAS 160 is effective for fiscal years beginning on or after December 15, 2008, with early adoption permitted, and it is to be applied prospectively. SFAS 160 is to be applied prospectively as of the beginning of the fiscal year in which it is initially applied, except for the presentation and disclosure requirements, which must be applied retrospectively for all periods presented. The adoption of SFAS 160 will not have an impact on our consolidated financial statements.

In February 2008, the FASB issued FASB Staff Position No. 157-1 ("FSP 157-1"), "Application of FASB Statement No. 157 to FASB Statement No. 13 and Other Accounting Pronouncements That Address Fair Value Measurements for Purposes of Lease Classification or Measurement under Statement 13." FSP 157-1 is effective upon initial adoption of SFAS 157, and indicates that it does not apply under SFAS 13, "Accounting for Leases" and other accounting pronouncements that address fair value measurements for purposes of lease classification or measurement under SFAS 13. This scope exception does not apply to assets acquired and liabilities assumed in a business combination that are required to be measured at fair value under SFAS 141 or SFAS 141R, regardless of whether those assets and liabilities are related to leases. The adoption of FSP 157-1 did not have an impact on our consolidated financial statements.

Also in February 2008, the FASB issued FASB Staff Position No. 157-2 ("FSP 157-2"), "Effective Date of FASB Statement No. 157." With the issuance of FSP 157-2, the FASB agreed to: (a) defer the effective date in SFAS No. 157 for one year for certain nonfinancial assets and nonfinancial liabilities, except those that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually), and (b) remove certain leasing transactions from the scope of SFAS 157. The deferral is intended to provide the FASB time to consider the effect of certain implementation issues that have arisen from the application of SFAS 157 to these assets and liabilities.

In March 2008, the FASB issued SFAS No. 161, "Disclosures about Derivative Instruments and Hedging Activities" ("SFAS 161"). SFAS 161 is intended to improve financial reporting of derivative instruments and hedging activities by requiring enhanced disclosures to enable financial statement users to better understand the effects of derivatives and hedging on an entity's financial position, financial performance and cash flows. The provisions of SFAS 161 are effective for interim periods and fiscal years beginning after November 15, 2008, with early adoption encouraged. We do not anticipate that the adoption of SFAS 161 will have a material impact on our consolidated results of operations or consolidated financial position.

In April 2008, the FASB issued FASB Staff Position No. 142-3 "Determination of the useful life of Intangible Assets" ("FSP 142-3"), which amends the factors a company should consider when developing renewal assumptions used to determine the useful life of an intangible asset under SFAS142. This Issue is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. SFAS 142 requires companies to consider whether renewal can be completed without substantial cost or material modification of the existing terms and conditions associated with the asset. FSP 142-3 replaces the previous useful life criteria with a new requirement—that an entity consider its own historical experience in renewing similar arrangements. If historical experience does not exist then the Company would consider market participant assumptions regarding renewal including 1) highest and best use of the asset by a market participant, and 2) adjustments for other entity-specific factors included in SFAS 142. We do not anticipate that the adoption of FSP 142-3 will have a material impact on our consolidated results of operations or consolidated financial position.

In May 2008, the FASB issued SFAS No. 162, "The Hierarchy of Generally Accepted Accounting Principles" ("SFAS 162"). SFAS 162 is intended to improve financial reporting by identifying a consistent framework, or hierarchy, for selecting accounting principles to be used in preparing financial statements that are presented in conformity with GAAP for nongovernmental entities. SFAS 162 is effective 60 days following the SEC's approval of the Public Company Accounting Oversight Board ("PCAOB") amendments to AU Section 411, "The Meaning of Present Fairly in Conformity with Generally Accepted Accounting Principles." We do not expect the adoption of SFAS 162 will have a material impact on our consolidated results of operations or consolidated financial position.

On May 9, 2008, the FASB issued FASB Staff Position No. APB 14-1 ("FSP APB 14-1"), "Accounting for Convertible Debt Instruments That May Be Settled in Cash upon Conversion (Including Partial Cash Settlement)." FSP APB 14-1 clarifies that convertible debt instruments that may be settled in cash upon conversion (including partial cash settlement) are not addressed by paragraph 12 of APB Opinion No. 14, "Accounting for Convertible Debt and Debt Issued with Stock Purchase Warrants." Additionally, FSP APB 14-1 specifies that issuers of such instruments should separately account for the liability and equity components in a manner that will reflect the entity's nonconvertible debt borrowing rate when interest cost is recognized in subsequent periods. FSP APB14-1 is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. We are currently evaluating the impact that FSP APB 14-1 will have on our consolidated results of operations or consolidated financial position.

On June 16, 2008, the FASB issued FSP No. EITF 03-6-1 ("FSP EITF 03-6-1"), "Determining Whether Instruments Granted in Share-Based Payment Transactions Are Participating Securities," to address the question of whether instruments granted in share-based payment transactions are participating securities prior to vesting. FSP EITF 03-6-1 indicates that unvested share-based payment awards that contain rights to dividend payments should be included in earnings per share calculations. The guidance will be effective for fiscal years beginning after December 15, 2008. We are currently evaluating the requirements of FSP EITF 03-6-1 and the impact that its adoption will have on the consolidated results of operations or consolidated financial position.

In June 2008, the FASB issued Emerging Issues Task Force Issue 07-5 "Determining whether an Instrument (or Embedded Feature) is indexed to an Entity's Own Stock" ("EITF No. 07-5"). This Issue is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. Early application is not permitted. Paragraph 11(a) of Statement of Financial Accounting Standard No 133 "Accounting for Derivatives and Hedging Activities" ("FAS 133") specifies that a contract that would otherwise meet the definition of a derivative but is both (a) indexed to the Company's own stock and (b) classified in stockholders' equity in the statement of financial position would not be considered a derivative financial instrument. EITF No.07-5 provides a new two-step model to be applied in determining whether a financial instrument or an embedded feature is indexed to an issuer's own stock and thus able to qualify for the FAS 133 paragraph 11(a) scope exception. We believe adopting this statement will not have a material impact on the financial statements.

In June 2008, FASB issued EITF 08-4, "Transition Guidance for Conforming Changes to Issue No. 98-5". The objective of EITF 08-4 is to provide transition guidance for conforming changes made to EITF 98-5, "Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustable Conversion Ratios", that result from EITF 00-27 "Application of Issue No. 98-5 to Certain Convertible Instruments", and FAS 150, "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity". This Issue is effective for financial statements issued for fiscal years ending after December 15, 2008. Early application is permitted. We are currently evaluating the impact that adopting EITF 08-4 will have on the financial statements.

On October 10, 2008, the FASB issued FSP 157-3, "Determining the Fair Value of a Financial Asset When the Market for That Asset Is Not Active," which clarifies the application of FAS 157 in a market that is not active and provides an example to illustrate key considerations in determining the fair value of a financial asset when the market for that financial asset is not active. FSP 157-3 became effective on October 10, 2008, and its adoption did not have a material impact on the Company's financial position or results for the year ended December 31, 2008.

In January 2009, the FASB issued FSP EITF 99-20-1, "Amendments to the Impairment Guidance of EITF Issue No. 99-20, and EITF Issue No. 99-20, Recognition of Interest Income and Impairment on Purchased and Retained Beneficial Interests in Securitized Financial Assets" ("FSP EITF 99-20-1"). FSP EITF 99-20-1 changes the impairment model included within EITF 99-20 to be more consistent with the impairment models of FAS No. 115. FSP EITF 99-20-1 achieves this by amending the impairment model in EITF 99-20 to remove its exclusive reliance on "market participant" estimates of future cash flows used in determining fair value. Changing the cash flows used to analyze other-than-temporary impairment from the "market participant" view to a holder's estimate of whether there has been a "probable" adverse change in estimated cash flows allows companies to apply reasonable judgment in assessing whether an other-than-temporary impairment has occurred. The adoption of FSP EITF 99-20-1 will not have a material impact on our consolidated financial statements.

In April 2009, the FASB issued FSP FAS 157-4, "Determining Fair Value When the Volume and Level of Activity for the Asset or Liability Have Significantly Decreased and Identifying Transactions That Are Not Orderly" ("FSP FAS 157-4"). FSP FAS 157-4 provides additional guidance for estimating fair value measurements in accordance with FASB Statement No. 157 when there is not an active market or where the price inputs being used represent distressed sales. FSP FAS 157-4 provides additional guidance on the major categories for which equity and debt securities disclosures are to be presented and amends the disclosure requirements of FASB Statement No. 157 to require disclosure in interim and annual periods of the inputs and valuation technique(s) used to measure fair value and a discussion of changes in valuation techniques and related inputs, if any, during the period. FSP FAS 157-4 shall be applied prospectively and is effective for interim and annual reporting periods ending after June 15, 2009, with early adoption permitted for periods ending after March 15, 2009. An entity early adopting this FSP must also early adopt FSP No. FAS 115-2 and FAS 124-2, Recognition and Presentation of Other-Than-Temporary Impairment ("FSP FAS 115-2 and FAS 124-2"). We are in the process of evaluating the impact, if any, of applying this FSP on its financial position, results of operations and cash flows.

In April 2009, the FASB issued FSP FAS 115-2 and FAS 124-2. This FSP amends SFAS 115, "Accounting for Certain Investments in Debt and Equity Securities," SFAS 124, "Accounting for Certain Investments Held by Not-for-Profit Organizations," and EITF Issue No. 99-20, "Recognition of Interest Income and Impairment on Purchased Beneficial Interests and Beneficial Interests That Continue to Be Held by a Transferor in Securitized Financial Assets," to make the other-than-temporary impairments guidance more operational and to improve the presentation of other-than-temporary impairments in the financial statements. This FSP will replace the existing requirement that the entity's management assert it has both the intent and ability to hold an impaired debt security until recovery with a requirement that management assert it does not have the intent to sell the security, and it is more likely than not it will not have to sell the security before recovery of its cost basis. This FSP provides increased disclosure about the credit and noncredit components of impaired debt securities that are not expected to be sold and also requires increased and more frequent disclosures regarding expected cash flows, credit losses, and an aging of securities with unrealized losses. Although this FSP does not result in a change in the carrying amount of debt securities, it does require that the portion of an other-than-temporary impairment not related to a credit loss for a held-to-maturity security be recognized in a new category of other comprehensive income and be amortized over the remaining life of the debt security as an increase in the carrying value of the security. This FSP shall be effective for interim and annual periods ending after June 15, 2009, with early adoption permitted for periods ending after March 15, 2009. An entity may early adopt this FSP only if it also elects to early adopt FSP FAS 157-4. Also, if an entity elects to early adopt either FSP FAS 157-4 or FSP FAS 107-1 and APB 28-1, the entity also is required to early adopt this FSP. The Company is

currently evaluating this new FSP but does not believe that it will have a significant impact on the determination or reporting of the financial results.

In April 2009, the FASB issued FSP No. FAS 107-1 and APB 28-1, "Interim Disclosures about Fair Value of Financial Instruments" ("FSP FAS 107-1 and APB 28-1"). FSP FAS 107-1 and APB 28-1 requires companies to disclose in interim financial statements the fair value of financial instruments within the scope of FASB Statement No. 107, Disclosures about Fair Value of Financial Instruments. However, companies are not required to provide in interim periods the disclosures about the concentration of credit risk of all financial instruments that are currently required in annual financial statements. The fair-value information disclosed in the footnotes must be presented together with the related carrying amount, making it clear whether the fair value and carrying amount represent assets or liabilities and how the carrying amount relates to what is reported in the balance sheet. FSP FAS 107-1 and APB 28-1 also requires that companies disclose the method or methods and significant assumptions used to estimate the fair value of financial instruments and a discussion of changes, if any, in the method or methods and significant assumptions during the period. The FSP shall be applied prospectively and is effective for interim and annual periods ending after June 15, 2009, with early adoption permitted for periods ending after March 15, 2009. An entity early adopting FSP FAS 107-1 and APB 28-1 must also early adopt FSP FAS 157-4 as well as FSP FAS 115-2 and FAS 124-2. We will adopt the disclosure requirements of this pronouncement for the quarter ended June 30, 2009, in conjunction with the adoption of FSP FAS 157-4, FSP FAS 115-2 and FAS 124-2.

In May 2009, the FASB issued SFAS No. 165, "Subsequent Events" ("SFAS 165"). SFAS 165 sets forth the period after the balance sheet date during which management of a reporting entity should evaluate events or transactions that may occur for potential recognition or disclosure in the financial statements, the circumstances under which an entity should recognize events or transactions occurring after the balance sheet date in its financial statements, and the disclosures that an entity should make about events or transactions that occurred after the balance sheet date. SFAS 165 will be effective for interim or annual period ending after June 15, 2009 and will be applied prospectively. The Company will adopt the requirements of this pronouncement for the quarter ended June 30, 2009. We do not anticipate the adoption of SFAS 165 will have an impact on our consolidated results of operations or consolidated financial position.

#### **RESULTS OF OPERATIONS**

Comparison of the Years Ended December 31, 2008 and 2007

	2008			2007			
			% of			% of	
		Amount	Revenue		Amount	Revenue	
Revenue	\$	787,106	100.0%	\$	647,349	100.0%	
Cost of Revenue		765,769	97.3%		428,913	66.3%	
Gross profit		21,337	2.7%		218,436	33.7%	
Research and development expenses and Grant							
reimbursements		8,530,408	1083.8%		16,772,470	2590.9%	
General and administrative expenses		5,009,418	636.4%		6,781,705	1047.6%	
Non-operating income (expense):		(20,385,024)	-2589.9%		7,437,014	1148.8%	
Net loss	\$	(33,903,513)	-4307.4%	\$	(15,898,725)	-2456.0%	

#### Revenues

Revenues relate to license fees and royalties collected that are being amortized over the period of the license granted, and are therefore typically consistent between periods. The increase in revenue during the year ended December 31, 2008, was due to more new licenses being granted as compared to the year ended December 31, 2007. We received approximately \$3,500,000 in license fees in 2008, and of that we recognized just \$300,000 in license fee revenues during the year ended December 31, 2008. We also received an additional \$1,500,000 from Transition Holdings, Inc. as license fee revenue in the first quarter 2009. We expect that our collaboration efforts with CHA Biotech in the SCRMI joint venture will provide us valuable opportunities to develop and license our technologies.

#### Research and Development Expenses and Grant Reimbursements

Research and development expenses ("R&D") consists mainly of facility costs, payroll and payroll related expenses, research supplies and costs incurred in connection with specific research grants, and for scientific research. R&D expenditures declined from \$16,772,470 in 2007 to \$8,530,408 for 2008. The decline in R&D expenditures during the 2008 as compared to 2007 is primarily due to the fact that we closed our Charlestown, Massachusetts and Alameda, California facilities at the end of May 2008.

Our research and development expenses consist primarily of costs associated with basic and pre-clinical research exclusively in the field of human stem cell therapies and regenerative medicine, with focus on development of our technologies in cellular reprogramming, reduced complexity applications, and stem cell differentiation. These expenses represent both pre-clinical development costs and costs associated with non-clinical support activities such as quality control and regulatory processes. The cost of our research and development personnel is the most significant category of expense; however, we also incur expenses with third parties, including license agreements, sponsored research programs and consulting expenses.

We do not segregate research and development costs by project because our research is focused exclusively on human stem cell therapies as a unitary field of study. Although we have three principal areas of focus for our research, these areas are completely intertwined and have not yet matured to the point where they are separate and distinct projects. The intellectual property, scientists and other resources dedicated to these efforts are not separately allocated to individual projects, but rather are conducting our research on an integrated basis.

We expect that research and development expenses will increase in the foreseeable future as we add personnel, expand our pre-clinical research, begin clinical trial activities, and increase our regulatory compliance capabilities. The amount of these increases is difficult to predict due to the uncertainty inherent in the timing and extent of progress in our research programs, and initiation of clinical trials. In addition, the results from our basic research and pre-clinical trials, as well as the results of trials of similar therapeutics under development by others, will influence the number, size and duration of planned and unplanned trials. As our research efforts mature, we will continue to review the direction of our research based on an assessment of the value of possible commercial applications emerging from these efforts. Based on this continuing review, we expect to establish discrete research programs and evaluate the cost and potential for cash inflows from commercializing products, partnering with others in the biotechnology or pharmaceutical industry, or licensing the technologies associated with these programs to third parties.

We believe that it is not possible at this stage to provide a meaningful estimate of the total cost to complete our ongoing projects and bring any proposed products to market. The use of human embryonic stem cells as a therapy is an emerging area of medicine, and it is not known what clinical trials will be required by the FDA in order to gain marketing approval. Costs to complete could vary substantially depending upon the projects selected for development, the number of clinical trials required and the number of patients needed for each study. It is possible that the completion of these studies could be delayed for a variety of reasons, including difficulties in enrolling patients, delays in manufacturing, incomplete or inconsistent data from the pre-clinical or clinical trials, and difficulties evaluating the trial results. Any delay in completion of a trial would increase the cost of that trial, which would harm our results of operations. Due to these uncertainties, we cannot reasonably estimate the size, nature nor timing of the costs to complete, or the amount or timing of the net cash inflows from our current activities. Until we obtain further relevant pre-clinical and clinical data, we will not be able to estimate our future expenses related to these programs or when, if ever, and to what extent we will receive cash inflows from resulting products.

# General and Administrative Expenses

General and administrative expenses for 2008 compared to 2007 decreased by \$1,772,287 to \$5,009,418 in 2008. This expense decrease was primarily a result of management's efforts to reduce costs and streamline operations so that we could move closer to achieving profitability. General and administrative expenses should continue to slightly decrease over the short term as we continue to streamline our operations and reduce our costs until we are able to expand. We expect that with the successful IND submission of our core technologies and a rebound of the U.S. and world economy will come additional opportunities for growth and capital.

#### Other Income (Expense)

Other income (expense), net, for 2008 and 2007 was (\$20,385,024) and \$7,437,014, respectively. The change of (\$27,822,038) is primarily due to the increase in interest expense, the decrease in the adjustments to fair value of derivatives and the loss on settlement of debt.

The interest expense including late fees was \$26,614,761 and \$21,023,663, for the years ended 2008 and 2007, respectively. The increase in interest expense is due to the additional debt that was issued and the late fees incurred as we have not issued shares to convert the debt to equity and we do not have the cash to pay down the notes. Further, the interest expense in 2008 was greater than in 2007 because we amortized remaining debt discounts on all outstanding debentures as a result of our default on August 6, 2008.

The gain on the fair value of derivatives was \$13,082,247 and \$32,835,057, for the years ended 2008 and 2007, respectively. The decline in our share price in 2007 and 2008 contributed most significantly to the gain on the fair value of derivatives. In periods when the share price declines, the derivative securities become less attractive to exercise or out-of-the-money, and therefore the value of the derivative liabilities declines.

During the year ended 2008, we had a loss of \$5,436,137 related to debt settlement compared to a gain of \$193,862 during the year ended 2007. Between September 29, 2008 and January 20, 2009, the Company settled certain past due accounts payable by the issuance of shares of its common stock. In aggregate, the Company settled \$1,108,673 in accounts payable through the issuance of 260,116,283 shares of its common stock. A loss of \$4,695,289 was recorded related to the settlement of this debt during the year ended December 31, 2008 related to the settlement of these payable balances.

# LIQUIDITY AND CAPITAL RESOURCES

#### Cash Flows

The following table sets forth a summary of our cash flows for the periods indicated below:

	2008	2007
Net cash used in operating activities	\$ (2,964,820)	\$ (16,031,464)
Net cash used in investing activities	(174,514)	(139,873)
Net cash provided by financing activities	2,790,122	8,648,117
Net decrease in cash and cash equivalents	(349,212)	(7,523,220)
Cash and cash equivalents at the end of the period	\$ 816,904	\$ 1,166,116

As reflected in the accompanying financial statements, we have losses from operations, negative cash flows from operations, a substantial stockholders' deficit and current liabilities exceed current assets. We may thus not be able to continue as a going concern and fund cash requirements for operations through the next 12 months with current cash reserves. As discussed below, the Company was able to raise additional cash in the second half of 2008 and the first quarter of 2009. Notwithstanding success in raising capital, there continues to be substantial doubt about the Company's ability to continue as a going concern.

In view of the matters described in the preceding paragraph, recoverability of a major portion of the recorded asset amounts shown in the accompanying consolidated balance sheet is dependent upon our continued operations, which, in turn, is dependent upon our ability to continue to raise capital and ultimately generate positive cash flows from operations. The financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or amounts and classifications of liabilities that might be necessary should the we be unable to continue its existence.

We are financing our operations primarily from the following activities:

- On April 4, 2008, we released closing escrow on the issuance of \$4,038,880 of our amortizing senior secured convertible debentures and associated warrants. The net cash and cash in-kind received by the Company related to this financing was \$2,212,431.
- On April 30, 2008 we received a one time payment of \$300,000 from Terumo International which extended their ability to commence a Phase I Clinical Trial in Japan by one year.
- On June 17, 2008, the Company drew down \$60,000 and received \$50,000 (reflecting a 16.66% original issue discount) under Note B described in Note 6 to the financial statements.
- On July 10, 2008, we granted an exclusive license to Embryome Sciences, Inc., a wholly owned subsidiary of BioTime, Inc., to use its "ACTCellerate" embryonic stem cell technology and a bank of over 140 diverse progenitor cell lines derived using that technology. Under the agreement, we received an up-front payment of \$470,000, and are eligible to receive an 8% royalty on sales of products, services, and processes that utilize the licensed technology.
- Between September 29, 2008 and January 20, 2009, we settled certain past due accounts payable by the issuance of shares of its common stock. In aggregate, we settled \$1,108,673 in accounts payable through the issuance of 260,116,283 shares of our common stock.
- On December 1, 2008, we formed an international joint venture with CHA Bio & Diostech Co., Ltd. ("CHA"), a leading Korean-based biotechnology company focused on the development of stem cell technologies. CHA has agreed to contribute \$500,000 in working capital for the venture as well as paying the Company a license fee of \$500,000. As of June 15, 2009, CHA has paid the Company the entire \$500,000 towards payment of the license fee.
- On December 18, 2008, we entered into a license agreement with an Ireland-based investor, Transition Holdings Inc. ("Transition"), for certain of our non-core technology. Under the agreement, Transition agreed to acquire a license to the technology for \$3.5 million in cash. As of June 15, 2009, we have received the entire \$3.5 million in cash under this agreement. We expect to apply the proceeds towards its retinal epithelium ("RPE") cells program.
- On March 30, 2009, we entered into a second license agreement with CHA under which we will license our RPE technology, for the treatment of diseases of the eye, to CHA for development and commercialization exclusively in Korea. We are eligible to receive up to a total of \$1.9 million in fees based upon the parties achieving certain milestones, including us making an IND submission to the US FDA to commence clinical trials in humans using the technology. We received an up-front fee under the license in the amount of \$1,000,000. Under the agreement, CHA will incur all of the cost associated with the RPA clinical trials in Korea. The agreement is part of the joint venture between the two companies.
- On March 11, 2009, we entered into a \$5 million credit facility ("Facility") with a life sciences fund. Under the agreement, the proceeds from the Facility must be used exclusively for us to file an investigational new drug ("IND") for our retinal pigment epithelium ("RPE") program, and will allow us to complete both Phase I and Phase II studies in humans. An IND is required to commence clinical trials. Under the terms of the agreement, we may draw down funds, as needed for clinical development of the RPE program, from the investor through the issuance of Series A-1 convertible preferred stock. The preferred stock pays dividends, in kind of preferred stock, at an annual rate of 10%, matures in four years from the initial issuance date, and is convertible into common stock at \$0.75 per share. As of June 15, 2009, we have drawn down approximately \$1,505,000 on this facility.

• On May 13, 2009, the Company entered into a third license agreement with CHA under which the Company will license its proprietary "single blastomere technology," which has the potential to generate stable cell lines, including RPE for the treatment of diseases of the eye, for development and commercialization exclusively in Korea. We received an upfront license fee of \$300,000.

To a substantially lesser degree, financing of our operations is provided through grant funding, payments received under license agreements, and interest earned on cash and cash equivalents.

With the exception of 2002, when we sold certain assets of a subsidiary resulting in a gain for the year, we have incurred substantial net losses each year since inception as a result of research and development and general and administrative expenses in support of our operations. We anticipate incurring substantial net losses in the future.

Our cash and cash equivalents are limited. In the short term, we will require substantial additional funding prior to December 31, 2009 in order to maintain our current level of operations. If we are unable to raise additional funding, we will be forced to either substantially scale back our business operations or curtail our business operations entirely.

On a longer term basis, we have no expectation of generating any meaningful revenues from our product candidates for a substantial period of time and will rely on raising funds in capital transactions to finance our research and development programs. Our future cash requirements will depend on many factors, including the pace and scope of our research and development programs, the costs involved in filing, prosecuting and enforcing patents, and other costs associated with commercializing our potential products. We intend to seek additional funding primarily through public or private financing transactions, and, to a lesser degree, new licensing or scientific collaborations, grants from governmental or other institutions, and other related transactions. If we are unable to raise additional funds, we will be forced to either scale back or business efforts or curtail our business activities entirely. We anticipate that our available cash and expected income will be sufficient to finance most of our current activities for at least four months from the date we file these financial statements, although certain of these activities and related personnel may need to be reduced. We cannot assure you that public or private financing or grants will be available on acceptable terms, if at all. Several factors will affect our ability to raise additional funding, including, but not limited to, the volatility of our Common Stock.

#### **Contractual Obligations**

At December 31, 2008, our significant contractual obligations were as follows:

	Less tha	n One to	Three to	More Than	
	One Yea	ar Three Yea	rs Five Years	Five Years	Total
Operating lease obligations	265,6	89,9	- 10	-	355,587
Total	\$ 265,6	577 \$ 89,9	10 \$ -	\$ -	\$ 355,587

## Off-Balance Sheet Arrangements

We do not maintain any off-balance sheet arrangements, transactions, obligations or other relationships with unconsolidated entities that would be expected to have a material current or future effect upon our financial condition or results of operations.

# ADVANCED CELL TECHNOLOGY, INC. AND SUBSIDIARY CONSOLIDATED BALANCE SHEETS AS OF MARCH 31, 2009 AND DECEMBER 31, 2008

		March 31, 2009		ecember 31, 2008
	(	unaudited)		
ASSETS				
CLIDDENIE ACCETO				
CURRENT ASSETS:	ф	522 502	ф	016 004
Cash and cash equivalents Accounts receivable	\$	522,502	\$	816,904
		1,100,000		261,504
Prepaid expenses		102 100		32,476
Deferred royalty fees, current portion		182,198		182,198
Total current assets		1,804,700		1,293,082
Property and equipment, net		319,637		400,008
Investment in joint venture		83,925		225,200
Deferred royalty fees, less current portion		583,236		659,488
Deposits		2,170		039,400
•				-
Deferred issuance costs, net of amortization of \$0 and \$8,666,387		4,731,000		-
TOTAL ASSETS	¢	7 524 669	¢	2 577 779
TOTAL ASSETS	\$	7,524,668	\$	2,577,778
LIABILITIES AND STOCKHOLDERS' DEFICIT				
LIABILITIES AND STOCKHOLDERS DEFICIT				
CURRENT LIABILITIES:				
Accounts payable	\$	7,672,249	\$	8,287,786
Accrued expenses		1,771,808		2,741,591
Accrued default interest		4,224,077		3,717,384
Deferred revenue, current portion		875,017		834,578
Advances payable, other		130,000		130,000
2005 Convertible debenture and embedded derivatives, net of discounts of \$0				,
and \$0		101,865		85,997
2006 Convertible debenture and embedded derivatives (fair value \$2,164,019		101,000		32,557
and \$1,993,354)		2,164,019		1,993,354
2007 Convertible debenture and embedded derivatives (fair value \$11,275,803		_,,		-,,,,-,-,
and \$7,706,344)		11,275,803		7,706,344
February 2008 Convertible debenture and embedded derivatives (fair value		11,270,000		7,700,511
\$1,530,483 and \$1,757,470)		1,530,483		1,757,470
April 2008 Convertible debenture and embedded derivatives (fair value		1,000,100		1,707,170
\$4,541,625 and \$4,066,505)		4,541,625		4,066,505
Warrant and option derivatives		10,957,902		2,655,849
Deferred joint venture obligations, current portion		159,541		167,335
Short term capital leases		12,955		12,955
Notes payable, other		468,425		468,425
Total current liabilities		45,885,769		34,625,573
Total Cartell Havillies		+3,003,709		JT,U2J,J1J
Deferred joint venture obligations, less current portion		29,675		63,473
Deferred revenue, less current portion		6,083,301		3,817,716
Deterred revenue, less current portion		0,005,501		5,017,710

Total liabilities	51,998,745	38,506,762
Commitments and contingencies	-	-
STOCKHOLDERS' DEFICIT:		
Preferred stock, \$0.01 par value; 50,000,000 shares authorized, 0 issued and		
outstanding	-	-
Common stock, \$0.01par value; 500,000,000 shares authorized, 499,905,641		
and 429,448,381 issued and outstanding.	499,906	429,448
Additional paid-in capital	63,843,497	53,459,172
Accumulated deficit	(108,817,480)	(89,817,604)
Total stockholders' deficit	(44,474,077)	(35,928,984)
TOTAL LIABILITIES AND STOCKHOLDERS' DEFICIT	\$ 7,524,668	\$ 2,577,778

The accompanying notes are an integral part of these consolidated financial statements.

ADVANCED CELL TECHNOLOGY, INC. AND SUBSIDIARY CONSOLIDATED STATEMENTS OF OPERATIONS FOR THE THREE MONTHS ENDED MARCH 31, 2009 AND 2008 (UNAUDITED)

	Т	hree Months Er 2009	nded March 31, 2008		
Revenue (License fees and royalties)	\$	293,976	\$	124,343	
Cost of Revenue		138,752		190,728	
Gross profit		155,224		(66,385)	
Operating expenses:					
Research and development		436,607		3,967,552	
Grant reimbursements		(136,840)		(105,169)	
General and administrative expenses		747,078		1,725,822	
Loss on settlement of litigation		4,793,949		-	
Total operating expenses		5,840,794		5,588,205	
Loss from operations		(5,685,570)		(5,654,590)	
Non-operating income (expense):					
Interest income		1,621		6,849	
Interest expense and late fees		(582,821)		(4,206,616)	
Charges related to issuance of February 2008 convertible debentures		-		(685,573)	
Adjustments to fair value of derivatives		(10,841,612)		1,020,271	
Losses attributable to equity method investment		(95,126)		-	
Loss on modification of debentures		(1,796,368)		-	
Total non-operating income (expense)		(13,314,306)		(3,865,069)	
Loss before income tax		(18,999,876)		(9,519,659)	
Income tax		-		-	
Net loss	\$	(18,999,876)	\$	(9.519.659)	
	•	( - ) , ,	Ċ	(- ) ))	
Weighted average shares outstanding:					
Basic		476,926,873		95,870,879	
Diluted		476,926,873		95,870,879	
		. 70,720,073		25,570,072	
Loss per share:					
Basic	\$	(0.04)	\$	(0.10)	
Diluted	\$	(0.04)	\$	(0.10)	
Diluicu	Ф	(0.04)	Ф	(0.10)	

The accompanying notes are an integral part of these consolidated financial statements.

ADVANCED CELL TECHNOLOGY, INC. AND SUBSIDIARY CONSOLIDATED STATEMENT OF STOCKHOLDERS' DEFICIT FOR THE THREE MONTHS ENDED MARCH 31, 2009 (UNAUDITED)

	G	G. 1	Additional Paid in		Total
	Common Shares			Accumulated Deficit	Stockholders' Equity
Balance December 31, 2008	429,448,381	\$ 429,448	\$ 53,459,172	\$ (89,817,604)	\$ (35,928,984)
Convertible Debentures					
Conversions	6,176,413	6,177	325,625	-	331,802
Option compensation charges			92,833		92,833
Issuance of stock in settlement of accounts payable	39,380,847	39,381	5,259,767		5,299,148
Issuance of stock in payment of debt issue costs for preferred					
stock credit facility	24,900,000	24,900	4,706,100		4,731,000
Net loss for the three months ended March 31, 2009	-	-	-	(18,999,876)	(18,999,876)
Balance March 31, 2009	499,905,641	\$ 499,906	\$ 63,843,497	\$ (108,817,480)	\$ (44,474,077)

The accompanying notes are an integral part of these consolidated financial statements

ADVANCED CELL TECHNOLOGY, INC. AND SUBSIDIARY CONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE THREE MONTHS ENDED MARCH 31, 2009 AND 2008 (UNAUDITED)

		inded March 31,
	2009	2008
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	\$ (18,999,876)	\$ (9,519,659)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	126,520	109,904
Amortization of deferred charges	76,252	338,227
Amortization of deferred revenue	(293,976)	(124,342)
Stock based compensation	92,833	378,853
Amortization of deferred issuance costs	-	825,612
Amortization of discounts	-	3,372,267
Loss on modification of debentures	1,796,368	-
Adjustements to fair value of derivatives	10,841,612	(1,020,271)
Charges related to issuance of February 2008 convertible notes	-	685,573
Warrants issued for consulting services	-	155,281
Charges related to settlement of anti-dilution provision	-	15,581
Loss on settlement of litigation	4,793,949	-
Loss attributable to investment in joint venture	95,126	-
Amortization of deferred joint venture obligations	(41,592)	-
(Increase) / decrease in assets:		
Accounts receivable	261,504	(4,767)
Prepaid expenses	32,476	(44,673)
Increase / (decrease) in current liabilities:		
Accounts payable and accrued expenses	(1,080,121)	3,243,846
Accrued default interest	506,693	4,813
Deferred revenue	1,500,000	-
Net cash used in operating activities	(292,232)	(1,583,755)
CASH FLOWS FROM INVESTING ACTIVITIES		
Purchases of property and equipment	-	(142,588)
Payment of deposits	(2,170)	-
Charges related to Mytogen acquisition	-	-
Net cash used in investing activities	(2,170)	(142,588)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from issuance of convertible notes		550,000
	-	
Payments on notes and leases	-	(18,650) 630,000
Proceeds from notes payable	-	030,000
Net cash provided by financing activities	-	1,161,350
The two provides of intenents well the		1,101,550

Three Months Ended March 31,

NET DECREASE IN CASH AND CASH EQUIVALENTS	(294,402)		(564,993)
CASH AND CASH EQUIVALENTS, BEGINNING BALANCE	816,904		1,166,116
CASH AND CASH EQUIVALENTS, ENDING BALANCE	\$ 522,502	\$	601,123
CASH PAID FOR:			
Interest	\$ -	\$	2,504
Income taxes	\$ 499	\$	-
SUPPLEMENTAL DISCLOSURE OF NON-CASH FINANCING ACTIVITIES:			
Issuance of 13,736,111 shares of common stock in redemption of convertible			
debentures	\$ -	\$	2,109,105
Issuance of 6,176,413 and 1,368,460 shares of common stock in conversion of			
convertible debentures	\$ 331,802	\$	405,639
Issuance of 24,900,000 shares of common stock in payment convertible preferred			
stock issuance costs	\$ 4,731,000	\$	-
Issuance of 39,380,847 shares of common stock in settlement of litigation	\$ 5,299,148	\$	-
Issuance of 862,522 shares of common stock in payment of consulting services	\$ -	\$	204,352
Issuance of 70,503 shares of common stock to settle an anti-dilution provision			
feature of convertible debenture	\$ -	\$	15,581
Issuance of 1,200,000 shares of common stock upon exercise of employee stock			
options	\$	Φ.	60,000

The accompanying notes are an integral part of these consolidated financial statements.

# ADVANCED CELL TECHNOLOGY, INC. AND SUBSIDIARY NOTES TO CONSOLIDATED FINANCIAL STATEMENTS March 31, 2009

#### 1. ORGANIZATIONAL MATTERS

#### Organization and Nature of Business

Advanced Cell Technology, Inc. (the "Company") is a biotechnology company, incorporated in the state Delaware, focused on developing and commercializing human embryonic and adult stem cell technology in the emerging fields of regenerative medicine. Principal activities to date have included obtaining financing, securing operating facilities, and conducting research and development. The Company has no therapeutic products currently available for sale and does not expect to have any therapeutic products commercially available for sale for a period of years, if at all. These factors indicate that the Company's ability to continue its research and development activities is dependent upon the ability of management to obtain additional financing as required.

#### Going Concern

As reflected in the accompanying financial statements, the Company has losses from operations, negative cash flows from operations, a substantial stockholders' deficit and current liabilities exceed current assets. The Company may thus not be able to continue as a going concern and fund cash requirements for operations through the next 12 months with current cash reserves. As discussed below, the Company was able to raise additional cash during the first quarter of 2009. Notwithstanding success in raising capital, there continues to be substantial doubt about the Company's ability to continue as a going concern.

In view of the matters described in the preceding paragraph, recoverability of a major portion of the recorded asset amounts shown in the accompanying consolidated balance sheet is dependent upon continued operations of the Company, which, in turn, is dependent upon the Company's ability to continue to raise capital and ultimately generate positive cash flows from operations. The financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or amounts and classifications of liabilities that might be necessary should the Company be unable to continue its existence.

Management has taken or plans to take the following steps that it believes will be sufficient to provide the Company with the ability to continue in existence:

- Between September 29, 2008 and January 20, 2009, the Company settled certain past due accounts payable by the issuance of shares of its common stock. In aggregate, the Company settled \$1,108,673 in accounts payable through the issuance of 260,116,283 shares of its common stock.
- On December 18, 2008, the Company entered into a license agreement with an Ireland-based investor, Transition Holdings Inc. ("Transition"), for certain of its non-core technology. Under the agreement, Transition agreed to acquire a license to the technology for \$3.5 million in cash. Through December 31, 2008, the Company had received \$2 million in cash under this agreement. During the three months ended March 31, 2009, the Company received \$1.5 million in cash under this agreement. The Company expects to apply the proceeds towards its retinal epithelium ("RPE") cells program.

- · On March 30, 2009, the Company entered into a license agreement with CHA under which the Company will license its retinal pigment epithelium ("RPE") technology, for the treatment of diseases of the eye, to CHA for development and commercialization exclusively in Korea. The Company is eligible to receive up to a total of \$1.9 million in fees based upon the parties achieving certain milestones, including the Company making an IND submission to the US FDA to commence clinical trials in humans using the technology. The Company received an up-front fee under the license in the amount of \$1,100,000 during the second quarter of 2009. Under the agreement, CHA will incur all of the costs associated with the RPA clinical trials in Korea. The agreement is part of continuing cooperation and collaboration between the two companies.
- On March 11, 2009, the Company entered into a \$5 million credit facility ("Facility") with a life sciences fund. Under the agreement, the proceeds from the Facility must be used exclusively for the Company to file an investigational new drug ("IND") for its retinal pigment epithelium ("RPE") program, and will allow the Company to complete both Phase I and Phase II studies in humans. An IND is required to commence clinical trials. Under the terms of the agreement, the Company may draw down funds, as needed for clinical development of the RPE program, from the investor through the issuance of Series A-1 convertible preferred stock. The preferred stock pays dividends, in kind of preferred stock, at an annual rate of 10%, matures in four years from the initial issuance date, and is convertible into common stock at \$0.75 per share. As of June 30, 2009, the Company has drawn down approximately \$1,810,000 on this facility.
- · On May 13, 2009, the Company entered into another license agreement with CHA under which the Company will license its proprietary "single blastomere technology," which has the potential to generate stable cell lines, including RPE for the treatment of diseases of the eye, for development and commercialization exclusively in Korea. The Company received an upfront license fee of \$300,000.
- · Management anticipates raising additional future capital from its current convertible debenture holders, or other financing sources, that will be used to fund any capital shortfalls. The terms of any financing will likely be negotiated based upon current market terms for similar financings. No commitments have been received for additional investment and no assurances can be given that this financing will ultimately be completed.
- Management has focused its scientific operations on product development in order to accelerate the time to market products which will ultimately generate revenues. While the amount or timing of such revenues cannot be determined, management believes that focused development will ultimately provide a quicker path to revenues, and an increased likelihood of raising additional financing.
- · Management will continue to pursue licensing opportunities of the Company's extensive intellectual property portfolio.

# 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation —The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP").

Principles of Consolidation —The accounts of the Company and its wholly-owned subsidiary Mytogen, Inc. ("Mytogen") are included in the accompanying consolidated financial statements. All intercompany balances and transactions were eliminated in consolidation.

Segment Reporting —SFAS No. 131, "Disclosure about Segments of an Enterprise and Related Information" requires use of the "management approach" model for segment reporting. The management approach model is based on the way a company's management organizes segments within the company for making operating decisions and assessing

performance. The Company determined it has one operating segment. Disaggregation of the Company's operating results is impracticable, because the Company's research and development activities and its assets overlap, and management reviews its business as a single operating segment. Thus, discrete financial information is not available by more than one operating segment.

Use of Estimates —These consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States and, accordingly, require management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Specifically, the Company's management has estimated variables used to calculate the Black-Scholes and binomial lattice model calculations used to value derivative instruments as discussed below under "Fair Value Measurements". In addition, management has estimated the expected economic life and value of the Company's licensed technology, the Company's net operating loss for tax purposes, share-based payments for compensation to employees, directors, consultants and investment banks, and the useful lives of the Company's fixed assets and its accounts receivable allowance. Actual results could differ from those estimates.

Reclassifications—Certain prior year financial statement balances have been reclassified to conform to the current year presentation. These reclassifications had no effect on the recorded net loss.

Cash and Cash Equivalents —Cash equivalents are comprised of certain highly liquid investments with maturities of three months or less when purchased. The Company maintains its cash in bank deposit accounts, which at times, may exceed federally insured limits. The Company has not experienced any losses related to this concentration of risk. As of March 31, 2009 and December 31, 2008, the Company had deposits in excess of federally-insured limits totaling \$151,227 and \$655,074, respectively. The Company has not experienced any losses in such accounts.

Accounts Receivable —The Company periodically assesses its accounts receivable for collectability on a specific identification basis. Past due status on accounts receivable is based on contractual terms. If collectability of an account becomes unlikely, the Company records an allowance for that doubtful account. Once the Company has exhausted efforts to collect, management writes off the account receivable against the allowance it has already created. The Company does not require collateral for its trade accounts receivable.

Property and Equipment — The Company records its property and equipment at historical cost. The Company expenses maintenance and repairs as incurred. Upon disposition of property and equipment, the gross cost and accumulated depreciation are written off and the difference between the proceeds and the net book value is recorded as a gain or loss on sale of assets. In the case of certain assets acquired under capital leases, the assets are recorded net of imputed interest, based upon the net present value of future payments. Assets under capital lease are pledged as collateral for the related lease.

The Company provides for depreciation over the assets' estimated useful lives as follows:

Machinery & equipment 4 years Computer equipment 3 years Office furniture 4 years

Leasehold improvements Lesser of lease life or economic life Capital leases Lesser of lease life or economic life

Equity Method Investment — The Company follows Accounting Principles Board Opinion No. 18 The Equity Method of Accounting for Investments in Common Stock ("APB No. 18") in accounting for its investment in the joint venture. In the event the Company's share of the joint venture's net losses reduces the Company's investment to zero, the Company will discontinue applying the equity method and will not provide for additional losses unless the Company has guaranteed obligations of the joint venture or is otherwise committed to provide further financial support for the joint venture. If the joint venture subsequently reports net income, the Company will resume applying the equity method only after its share of that net income equals the share of net losses not recognized during the period the equity method was suspended.

Deferred Issuance Costs —Payments, either in cash or share-based payments, made in connection with the sale of debentures are recorded as deferred debt issuance costs and amortized using the effective interest method over the lives of the related debentures. The weighted average amortization period for deferred debt issuance costs is 36 months.

Intangible and Long-Lived Assets — The Company follows Statement of Financial Accounting Standards ("FAS") No. 144, "Accounting for Impairment of Disposal of Long-Lived Assets," which established a "primary asset" approach to determine the cash flow estimation period for a group of assets and liabilities that represents the unit of accounting for a long-lived asset to be held and used. Long-lived assets to be held and used are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. The carrying amount of a long-lived asset is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset. Long-lived assets to be disposed of are reported at the lower of carrying amount or fair value less cost to sell. During the three months ended March 31, 2009 and 2008, no impairment loss was recognized.

Fair Value Measurements — For certain financial instruments, including accounts receivable, accounts payable, accrued expenses, interest payable, advances payable and notes payable, the carrying amounts approximate fair value due to their relatively short maturities.

Emerging Issues Task Force ("EITF") No. 00-19 "Accounting for Derivative Financial Instruments Indexed to and Potentially Settled in, a Company's Own Stock" ("EITF 00-19"), provides a criteria for determining whether freestanding contracts that are settled in a company's own stock, including common stock options and warrants, should be designated as either an equity instrument, an asset or as a liability under SFAS No. 133 "Accounting for Derivative Instruments and Hedging Activities." Under the provisions of EITF 00-19, a contract designated as an asset or a liability must be carried at fair value on a company's balance sheet, with any changes in fair value recorded in a company's results of operations. Using the criteria in EITF 00-19, the Company has determined that its outstanding options and warrants require liability accounting and records the fair values as warrant and option derivatives.

On January 1, 2008, the Company adopted FAS No. 157, "Fair Value Measurements" ("FAS 157"). FAS 157 defines fair value, and establishes a three-level valuation hierarchy for disclosures of fair value measurement that enhances disclosure requirements for fair value measures. The carrying amounts reported in the consolidated balance sheets for receivables and current liabilities each qualify as financial instruments and are a reasonable estimate of their fair values because of the short period of time between the origination of such instruments and their expected realization and their current market rate of interest. The three levels of valuation hierarchy are defined as follows:

- Level 1 inputs to the valuation methodology are quoted prices for identical assets or liabilities in active markets.
- Level 2 inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.
- Level 3 inputs to the valuation methodology are unobservable and significant to the fair value measurement.

FAS 133, "Accounting for Derivative Instruments and Hedging Activities" requires bifurcation of embedded derivative instruments and measurement of fair value for accounting purposes. In addition, FAS 155, "Accounting for Certain Hybrid Financial Instruments" requires measurement of fair values of hybrid financial instruments for accounting purposes. The Company applied the accounting prescribed in FAS 133 to account for its 2005 Convertible Debenture as described in Note 9. For practicality in the valuation of the debentures and for ease of presentation, the Company applied the accounting prescribed in FAS 155 to account for the 2006, 2007, February 2008, and April 2008 Convertible Debentures as described below in Notes 5, 6, 7, and 8.

In determining the appropriate fair value of the debentures, the Company used Level 2 inputs for its valuation methodology. For the periods from January 1, 2008 through March 31, 2008, the Company applied the Black-Scholes models, Binomial Option Pricing models, Standard Put Option Binomial models and the net present value of certain penalty amounts to value the debentures and their embedded derivatives. At December 31, 2008, to achieve greater cost efficiencies, the Company changed its application of the Income Approach as defined under paragraph 18 of FAS 157, by applying the Black-Scholes option pricing model in valuing all debentures and their embedded derivatives. This change did not materially impact the results of the Company's valuations of its debentures and embedded derivatives. The impact of the change in the application of the Income Approach was approximately 1.4% of the fair value of the Company's debentures and their embedded derivatives. FAS 157, paragraph 20 states that the disclosure provisions of Statement of Financial Accounting Standards No. 154 Accounting Changes and Error Corrections ("FAS 154") for a change in accounting estimate are not required for revisions resulting from a change in a valuation technique or its application.

Derivative liabilities are adjusted to reflect fair value at each period end, with any increase or decrease in the fair value being recorded in results of operations as Adjustments to Fair Value of Derivatives. The effects of interactions between embedded derivatives are calculated and accounted for in arriving at the overall fair value of the financial instruments. In addition, the fair values of freestanding derivative instruments such as warrant and option derivatives are valued using the Black-Scholes model.

At March 31, 2009, the Company identified the following assets and liabilities that are required to be presented on the balance sheet at fair value:

	Fair Value As of	Fair Value Measurements at March 31, 2009 Using Fair Value Hierarchy			
Derivative Liabilities	March 31, 2009	Level 1	Level 2	Level 3	
Conversion feature - 2005 debenture	19,943	-	19,943	-	
2006 Convertible debenture and embeded derivatives	2,164,019	-	2,164,019	_	
2007 Convertible debenture and embedded derivatives	11,275,803	-	11,275,803	-	
February 2008 Convertible debentures and embedded					
derivatives	1,530,483	-	1,530,483	-	
April 2008 Convertible debenture and embedded					
derivatives	4,541,625	-	4,541,625	-	
Warrant and option derivatives	10,957,902	-	10,957,902	-	
	30,489,775	-	30,489,775	-	

For the three months ended March 31, 2009 and 2008, the Company recognized a gain (loss) of (\$10,841,612) and \$1,020,271, respectively, for the changes in the valuation of the aforementioned liabilities.

The Company did not identify any other non-recurring assets and liabilities that are required to be presented in the consolidated balance sheets at fair value in accordance with FAS 157.

In February 2007, the FASB issued FAS No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities" ("FAS 159"). FAS 159 permits entities to choose to measure many financial assets and financial liabilities at fair value. Unrealized gains and losses on items for which the fair value option has been elected are reported in earnings. FAS 159 is effective as of the beginning of an entity's first fiscal year that begins after November 15, 2007. The Company adopted FAS 159 on January 1, 2008. The Company chose not to elect the option to measure the fair value of eligible financial assets and liabilities.

Revenue Recognition — The Company's revenues are generated from license and research agreements with collaborators. Licensing revenue is recognized on a straight-line basis over the shorter of the life of the license or the estimated economic life of the patents related to the license. License fee revenue begins to be recognized in the first full month following the effective date of the license agreement. Deferred revenue represents the portion of the license and other payments received that has not been earned. Costs associated with the license revenue are deferred and recognized over the same term as the revenue. Reimbursements of research expense pursuant to grants are recorded in the period during which collection of the reimbursement becomes assured, because the reimbursements are subject to approval.

Research and Development Costs —Research and development costs consist of expenditures for the research and development of patents and technology, which cannot be capitalized. The Company's research and development costs consist mainly of payroll and payroll related expenses, research supplies and research grants. Reimbursements of research expense pursuant to grants are recorded in the period during which collection of the reimbursement becomes assured, because the reimbursements are subject to approval. Research and development costs are expensed as incurred.

Share-Based Compensation —Effective January 1, 2006, the Company adopted the fair value recognition provisions of FAS 123(R), using the modified-prospective transition method. Under this method, stock-based compensation expense is recognized in the consolidated financial statements for stock options granted, modified or settled after the adoption date. In accordance with FAS 123(R), the unamortized portion of options granted prior to the adoption date is recognized into earnings after adoption. Results for prior periods have not been restated, as provided for under the modified-prospective method.

Under FAS 123(R), stock-based compensation expense recognized is based on the value of the portion of share-based payment awards that are ultimately expected to vest during the period. Based on this, our stock-based compensation is reduced for estimated forfeitures at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

The fair value of each stock option is estimated on the date of grant using the Black-Scholes option pricing model. Assumptions relative to volatility and anticipated forfeitures are determined at the time of grant with the following weighted average assumptions used in the three months ended March 31, 2009 and 2008:

Three Months Ended March 31,					
	2009	2008			
Expected life in years	4.0	4.0			
Volatility	148%	148%			
Risk free interest rate	2.50%	2.50%			
Expected dividends	None	None			
Expected forfeitures	13%	13%			

The assumptions used in the Black-Scholes models referred to above are based upon the following data: (1) The expected life of the option is estimated by considering the contractual term of the option, the vesting period of the

option, the employees' expected exercise behavior and the post-vesting employee turnover rate. (2) The expected stock price volatility of the underlying shares over the expected term of the option is based upon historical share price data. (3) The risk free interest rate is based on published U.S. Treasury Department interest rates for the expected terms of the underlying options. (4) Expected dividends are based on historical dividend data and expected future dividend activity. (5) The expected forfeiture rate is based on historical forfeiture activity and assumptions regarding future forfeitures based on the composition of current grantees.

In accordance with FAS 123(R), the benefits of tax deductions in excess of the compensation cost recognized for options exercised during the period are classified as financing cash inflows rather than operating cash inflows.

Income Taxes — Deferred income taxes are provided using the liability method whereby deferred tax assets are recognized for deductible temporary differences and operating loss and tax credit carryforwards, and deferred tax liabilities are recognized for taxable temporary differences. Temporary differences are the differences between the reported amounts of assets and liabilities and their tax bases. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized. Deferred tax assets and liabilities are adjusted for the effects of the changes in tax laws and rates of the date of enactment.

When tax returns are filed, it is highly certain that some positions taken would be sustained upon examination by the taxing authorities, while others are subject to uncertainty about the merits of the position taken or the amount of the position that would be ultimately sustained. The benefit of a tax position is recognized in the financial statements in the period during which, based on all available evidence, management believes it is more likely than not that the position will be sustained upon examination, including the resolution of appeals or litigation processes, if any. Tax positions taken are not offset or aggregated with other positions. Tax positions that meet the more-likely-than-not recognition threshold are measured as the largest amount of tax benefit that is more than 50 percent likely of being realized upon settlement with the applicable taxing authority. The portion of the benefits associated with tax positions taken that exceeds the amount measured as described above is reflected as a liability for unrecognized tax benefits in the accompanying balance sheet along with any associated interest and penalties that would be payable to the taxing authorities upon examination.

Applicable interest and penalties associated with unrecognized tax benefits are classified as additional income taxes in the statement of income.

Net Loss Per Share — Earnings per share is calculated in accordance with the SFAS No. 128, "Earnings Per Share" ("SFAS 128"). Basic earnings per share is based upon the weighted average number of common shares outstanding. Diluted earnings per share is based on the assumption that all dilutive convertible shares and stock options were converted or exercised. Dilution is computed by applying the treasury stock method. Under this method, options and warrants are assumed to be exercised at the beginning of the period (or at the time of issuance, if later), and as if funds obtained thereby were used to purchase common stock at the average market price during the period.

At March 31, 2009 and 2008, approximately 248,806,000 and 172,346,000 potentially dilutive shares, respectively, were excluded from the shares used to calculate diluted earnings per share as their inclusion would be anti-dilutive.

Concentrations and Other Risks —Currently, the Company's revenues and accounts receivable are concentrated on a small number of customers. The following table shows the Company's concentrations of its revenue for those customers comprising greater than 10% of total license revenue.

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	2009	2008
Genzyme Transgenics Corporation	11%	26%
Exeter Life Sciences, Inc.	10%	25%
Lifeline Cell Technology	*	13%
Start Licensing, Inc.	*	20%
Terumo Corporation	26%	**
International Stem Cell Corporation	13%	**
Transition Holdings, Inc.	15%	**

<sup>\*</sup>License revenue earned during the period was less than 10% of total license revenue.

Other risks include the uncertainty of the regulatory environment and the effect of future regulations on the Company's business activities. As the Company is a biotechnology research and development company, there is also the attendant risk that someone could commence legal proceedings over the Company's discoveries. Acts of God could also adversely affect the Company's business.

#### **Recent Accounting Pronouncements**

In December 2007, the FASB issued SFAS No. 141(R), "Business Combinations" ("SFAS 141R"), which replaced SFAS 141. SFAS 141R retains the purchase method of accounting for acquisitions, but requires a number of changes, including changes in the way assets and liabilities are recognized in the purchase accounting as well as requiring the expensing of acquisition-related costs as incurred. Furthermore, SFAS 141R provides guidance for recognizing and measuring the goodwill acquired in the business combination and determines what information to disclose to enable users of the financial statements to evaluate the nature and financial effects of the business combination. SFAS 141R is effective for fiscal years beginning on or after December 15, 2008. Earlier adoption is prohibited. The Company believes adopting FAS No. 141R will significantly impact its financial statements for any business combination completed after December 31, 2008.

In December 2007, the FASB issued SFAS No. 160, "Noncontrolling Interests in Consolidated Financial Statements — An Amendment of ARB No. 51" ("SFAS 160"). SFAS 160 amends ARB 51 to establish accounting and reporting standards for the noncontrolling interest in a subsidiary and for the deconsolidation of a subsidiary. It is intended to eliminate the diversity in practice regarding the accounting for transactions between equity and noncontrolling interests by requiring that they be treated as equity transactions. Further, it requires consolidated net income to be reported at amounts that include the amounts attributable to both the parent and the noncontrolling interest. SFAS 160 also establishes a single method of accounting for changes in a parent's ownership interest in a subsidiary that do not result in deconsolidation, requires that a parent recognize a gain or loss in net income when a subsidiary is deconsolidated, requires expanded disclosures in the consolidated financial statements that clearly identify and distinguish between the interests of the parent's owners and the interests of the noncontrolling owners of a subsidiary, among others. SFAS 160 is effective for fiscal years beginning on or after December 15, 2008, with early adoption permitted, and it is to be applied prospectively. SFAS 160 is to be applied prospectively as of the beginning of the fiscal year in which it is initially applied, except for the presentation and disclosure requirements, which must be applied retrospectively for all periods presented. The adoption of SFAS 160 did not have an impact on the Company's consolidated financial statements.

In March 2008, the FASB issued SFAS No. 161, "Disclosures about Derivative Instruments and Hedging Activities" ("SFAS 161"). SFAS 161 is intended to improve financial reporting of derivative instruments and hedging activities by requiring enhanced disclosures to enable financial statement users to better understand the effects of derivatives and

<sup>\*\*</sup>No license revenue earned from this customer during the period.

hedging on an entity's financial position, financial performance and cash flows. The provisions of SFAS 161 are effective for interim periods and fiscal years beginning after November 15, 2008, with early adoption encouraged. The adoption of SFAS 161 did not have a material impact on the Company's consolidated results of operations or consolidated financial position.

On June 16, 2008, the FASB issued FSP No. EITF 03-6-1 ("FSP EITF 03-6-1"), "Determining Whether Instruments Granted in Share-Based Payment Transactions Are Participating Securities," to address the question of whether instruments granted in share-based payment transactions are participating securities prior to vesting. FSP EITF 03-6-1 indicates that unvested share-based payment awards that contain rights to dividend payments should be included in earnings per share calculations. The guidance will be effective for fiscal years beginning after December 15, 2008. The adoption of FSP EITF 03-6-1 did not have an impact on the consolidated results of operations or consolidated financial position.

In June 2008, the FASB issued Emerging Issues Task Force Issue 07-5 ("EITF 07-5"), "Determining whether an Instrument (or Embedded Feature) is indexed to an Entity's Own Stock." EITF 07-5 is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. Early application is not permitted. Paragraph 11(a) of SFAS No. 133 "Accounting for Derivatives and Hedging Activities," specifies that a contract that would otherwise meet the definition of a derivative but is both (a) indexed to the Company's own stock and (b) classified in stockholders' equity in the statement of financial position would not be considered a derivative financial instrument. EITF 07-5 provides a new two-step model to be applied in determining whether a financial instrument or an embedded feature is indexed to an issuer's own stock and thus able to qualify for the SFAS 133 paragraph 11(a) scope exception. This standard triggers liability accounting on all options and warrants exercisable at strike prices denominated in any currency other than the functional currency of the operating entity. The adoption of EITF 07-5 did not have an impact on the consolidated results of operations or consolidated financial position.

In April 2008, the FASB issued FASB Staff Position No. 142-3 "Determination of the useful life of Intangible Assets" ("FSP 142-3"), which amends the factors a company should consider when developing renewal assumptions used to determine the useful life of an intangible asset under SFAS142. This Issue is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. SFAS 142 requires companies to consider whether renewal can be completed without substantial cost or material modification of the existing terms and conditions associated with the asset. FSP 142-3 replaces the previous useful life criteria with a new requirement—that an entity consider its own historical experience in renewing similar arrangements. If historical experience does not exist then the Company would consider market participant assumptions regarding renewal including 1) highest and best use of the asset by a market participant, and 2) adjustments for other entity-specific factors included in SFAS 142. The adoption of FSP 142-3 did not have a material impact on the consolidated results of operations or consolidated financial position.

On May 9, 2008, the FASB issued FASB Staff Position No. APB 14-1 ("FSP APB 14-1"), "Accounting for Convertible Debt Instruments That May Be Settled in Cash upon Conversion (Including Partial Cash Settlement)." FSP APB 14-1 clarifies that convertible debt instruments that may be settled in cash upon conversion (including partial cash settlement) are not addressed by paragraph 12 of APB Opinion No. 14, "Accounting for Convertible Debt and Debt Issued with Stock Purchase Warrants." Additionally, FSP APB 14-1 specifies that issuers of such instruments should separately account for the liability and equity components in a manner that will reflect the entity's nonconvertible debt borrowing rate when interest cost is recognized in subsequent periods. FSP APB14-1 is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. The adoption of FSP APB 14-1 did not have an impact on the consolidated results of operations or consolidated financial position.

In June 2008, FASB issued EITF 08-4, "Transition Guidance for Conforming Changes to Issue No. 98-5." The objective of EITF 08-4 is to provide transition guidance for conforming changes made to EITF 98-5, "Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustable Conversion Ratios," that result from EITF 00-27 "Application of Issue No. 98-5 to Certain Convertible Instruments," and SFAS 150, "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity." The adoption of EITF 08-4 did not

have an impact on the consolidated results of operations or consolidated financial position.

In April 2009, the FASB issued FSP FAS 157-4, "Determining Fair Value When the Volume and Level of Activity for the Asset or Liability Have Significantly Decreased and Identifying Transactions That Are Not Orderly" ("FSP FAS 157-4"). FSP FAS 157-4 provides additional guidance for estimating fair value measurements in accordance with FASB Statement No. 157 when there is not an active market or where the price inputs being used represent distressed sales. FSP FAS 157-4 provides additional guidance on the major categories for which equity and debt securities disclosures are to be presented and amends the disclosure requirements of FASB Statement No. 157 to require disclosure in interim and annual periods of the inputs and valuation technique(s) used to measure fair value and a discussion of changes in valuation techniques and related inputs, if any, during the period. FSP FAS 157-4 shall be applied prospectively and is effective for interim and annual reporting periods ending after June 15, 2009, with early adoption permitted for periods ending after March 15, 2009. An entity early adopting this FSP must also early adopt FSP No. FAS 115-2 and FAS 124-2, Recognition and Presentation of Other-Than-Temporary Impairment ("FSP FAS 115-2 and FAS 124-2"). The adoption of FSP FAS 157-4 did not have an impact on the Company's financial position, results of operations and cash flows.

In January 2009, the FASB issued FSP EITF 99-20-1, "Amendments to the Impairment Guidance of EITF Issue No. 99-20, and EITF Issue No. 99-20, Recognition of Interest Income and Impairment on Purchased and Retained Beneficial Interests in Securitized Financial Assets" ("FSP EITF 99-20-1"). FSP EITF 99-20-1 changes the impairment model included within EITF 99-20 to be more consistent with the impairment models of FAS No. 115. FSP EITF 99-20-1 achieves this by amending the impairment model in EITF 99-20 to remove its exclusive reliance on "market participant" estimates of future cash flows used in determining fair value. Changing the cash flows used to analyze other-than-temporary impairment from the "market participant" view to a holder's estimate of whether there has been a "probable" adverse change in estimated cash flows allows companies to apply reasonable judgment in assessing whether an other-than-temporary impairment has occurred. The adoption of FSP EITF 99-20-1 did not have a material impact on the Company's consolidated financial statements.

In April 2009, the FASB issued FSP FAS 115-2 and FAS 124-2. This FSP amends SFAS 115, "Accounting for Certain Investments in Debt and Equity Securities," SFAS 124, "Accounting for Certain Investments Held by Not-for-Profit Organizations," and EITF Issue No. 99-20, "Recognition of Interest Income and Impairment on Purchased Beneficial Interests and Beneficial Interests That Continue to Be Held by a Transferor in Securitized Financial Assets," to make the other-than-temporary impairments guidance more operational and to improve the presentation of other-than-temporary impairments in the financial statements. This FSP will replace the existing requirement that the entity's management assert it has both the intent and ability to hold an impaired debt security until recovery with a requirement that management assert it does not have the intent to sell the security, and it is more likely than not it will not have to sell the security before recovery of its cost basis. This FSP provides increased disclosure about the credit and noncredit components of impaired debt securities that are not expected to be sold and also requires increased and more frequent disclosures regarding expected cash flows, credit losses, and an aging of securities with unrealized losses. Although this FSP does not result in a change in the carrying amount of debt securities, it does require that the portion of an other-than-temporary impairment not related to a credit loss for a held-to-maturity security be recognized in a new category of other comprehensive income and be amortized over the remaining life of the debt security as an increase in the carrying value of the security. This FSP shall be effective for interim and annual periods ending after June 15, 2009, with early adoption permitted for periods ending after March 15, 2009. An entity may early adopt this FSP only if it also elects to early adopt FSP FAS 157-4. Also, if an entity elects to early adopt either FSP FAS 157-4 or FSP FAS 107-1 and APB 28-1, the entity also is required to early adopt this FSP. The adoption of FSP FAS 115-2 and FAS 124-2 did not have a material impact on the Company's consolidated financial statements.

In April 2009, the FASB issued FSP No. FAS 107-1 and APB 28-1, "Interim Disclosures about Fair Value of Financial Instruments" ("FSP FAS 107-1 and APB 28-1"). FSP FAS 107-1 and APB 28-1 requires companies to disclose in interim financial statements the fair value of financial instruments within the scope of FASB Statement No. 107, Disclosures about Fair Value of Financial Instruments. However, companies are not required to provide in interim periods the disclosures about the concentration of credit risk of all financial instruments that are currently required in annual financial statements. The fair-value information disclosed in the footnotes must be presented together with the related carrying amount, making it clear whether the fair value and carrying amount represent assets or liabilities and how the carrying amount relates to what is reported in the balance sheet. FSP FAS 107-1 and APB 28-1 also requires that companies disclose the method or methods and significant assumptions used to estimate the fair value of financial instruments and a discussion of changes, if any, in the method or methods and significant assumptions during the period. The FSP shall be applied prospectively and is effective for interim and annual periods ending after June 15, 2009, with early adoption permitted for periods ending after March 15, 2009. An entity early adopting FSP FAS 107-1 and APB 28-1 must also early adopt FSP FAS 157-4 as well as FSP FAS 115-2 and FAS 124-2. The Company will adopt the disclosure requirements of this pronouncement for the quarter ended June 30, 2009, in conjunction with the adoption of FSP FAS 157-4, FSP FAS 115-2 and FAS 124-2.

In May 2009, the FASB issued SFAS No. 165, "Subsequent Events" ("SFAS 165"). SFAS 165 sets forth the period after the balance sheet date during which management of a reporting entity should evaluate events or transactions that may occur for potential recognition or disclosure in the financial statements, the circumstances under which an entity should recognize events or transactions occurring after the balance sheet date in its financial statements, and the disclosures that an entity should make about events or transactions that occurred after the balance sheet date. SFAS 165 will be effective for interim or annual periods ending after June 15, 2009 and will be applied prospectively. The Company will adopt the requirements of this pronouncement for the quarter ended June 30, 2009. The Company does not anticipate the adoption of SFAS 165 will have an impact on its consolidated results of operations or consolidated financial position.

In June 2009, the FASB issued SFAS No. 166 "Accounting for Transfers of Financial Assets" ("SFAS 166"). Statement 166 is a revision to FASB Statement No. 140, Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities, and will require more information about transfers of financial assets, including securitization transactions, and where entities have continuing exposure to the risks related to transferred financial assets. It eliminates the concept of a "qualifying special-purpose entity," changes the requirements for derecognizing financial assets, and requires additional disclosures. SFAS 166 enhances information reported to users of financial statements by providing greater transparency about transfers of financial assets and an entity's continuing involvement in transferred financial assets.

SFAS 166 will be effective at the start of a reporting entity's first fiscal year beginning after November 15, 2009. Early application is not permitted. The Company is currently evaluating the impact of adoption of SFAS 166 on the accounting for its convertible notes and related warrant liabilities.

In June 2009, the FASB issued SFAS No. 167 "Amendments to FASB Interpretation No. 46(R)" ("SFAS 167"). Statement 167 is a revision to FASB Interpretation No. 46 (Revised December 2003), Consolidation of Variable Interest Entities, and changes how a reporting entity determines when an entity that is insufficiently capitalized or is not controlled through voting (or similar rights) should be consolidated. The determination of whether a reporting entity is required to consolidate another entity is based on, among other things, the other entity's purpose and design and the reporting entity's ability to direct the activities of the other entity that most significantly impact the other entity's economic performance. SFAS 167 will require a reporting entity to provide additional disclosures about its involvement with variable interest entities and any significant changes in risk exposure due to that involvement. A reporting entity will be required to disclose how its involvement with a variable interest entity affects the reporting entity's financial statements. SFAS 167 will be effective at the start of a reporting entity's first fiscal year beginning after November 15, 2009. Early application is not permitted. The Company is currently evaluating the impact, if any, of adoption of SFAS

167 on its financial statements.

In June 2009, the FASB issued SFAS No. 168 "The FASB Accounting Standards Codification and the Hierarchy of Generally Accepted Accounting Principles – A Replacement of FASB Statement No. 162" ("SFAS 168"). Statement 168 establishes the FASB Accounting Standards CodificationTM (Codification) as the single source of authoritative U.S. generally accepted accounting principles (U.S. GAAP) recognized by the FASB to be applied by nongovernmental entities. Rules and interpretive releases of the SEC under authority of federal securities laws are also sources of authoritative U.S. GAAP for SEC registrants. SFAS 168 and the Codification are effective for financial statements issued for interim and annual periods ending after September 15, 2009. When effective, the Codification will supersede all existing non-SEC accounting and reporting standards. All other nongrandfathered non-SEC accounting literature not included in the Codification will become nonauthoritative. Following SFAS 168, the FASB will not issue new standards in the form of Statements, FASB Staff Positions, or Emerging Issues Task Force Abstracts. Instead, the FASB will issue Accounting Standards Updates, which will serve only to: (a) update the Codification; (b) provide background information about the guidance; and (c) provide the bases for conclusions on the change(s) in the Codification. The adoption of SFAS 168 will not have an impact on the Company's consolidated financial statements.

#### 3. LICENSE REVENUE

In connection with the joint venture agreement discussed in Note 4, on December 1, 2008, the Company entered into a license agreement with CHA for the exclusive, worldwide license to the Hemangioblast Program. Under the agreement, CHA agreed to acquire the Company's core technology for an up-front payment of \$500,000 in cash. The Company received \$250,000 in December 2008 and the remaining \$250,000 in January 2009. The Company has recorded \$7,353 in license fee revenue for the three months ended March 31, 2009 in its accompanying consolidated statements of operations, and the remainder of the license fee has been accrued in deferred revenue at March 31, 2009. The Company is recognizing revenue from this agreement over its 17-year patent useful life.

On December 18, 2008, the Company entered into a license agreement with Transition for certain of its non-core technology. Under the agreement, Transition agreed to acquire a license to the technology for \$3.5 million in cash. The Company received \$2,000,000 during December 2008 and the remaining \$1,500,000 during the three months ended March 31, 2009. The Company expects to apply the proceeds towards its retinal epithelium ("RPE") cells program. The Company has recorded \$44,117 in license fee revenue for the three months ended March 31, 2009 in its accompanying consolidated statements of operations, and the remainder of the license fee has been accrued in deferred revenue at March 31, 2009. The Company is recognizing revenue from this agreement over its 17-year patent useful life.

On March 30, 2009, the Company entered into a second license agreement with CHA under which the Company will license its RPE technology, for the treatment of diseases of the eye, to CHA for development and commercialization exclusively in Korea. The Company is eligible to receive up to a total of \$1.9 million in fees based upon the parties achieving certain milestones, including the Company making an IND submission to the US FDA to commence clinical trials in humans using the technology. The Company received an up-front fee under the license in the amount of \$1,100,000 during the second quarter of 2009. Under the agreement, CHA will incur all of the costs associated with the RPA clinical trials in Korea. The Company has not recorded any license fee revenue for the three months ended March 31, 2009 in its accompanying consolidated statements of operations. The full \$1,100,000 license fee has been included in accounts receivable and accrued in deferred revenue at March 31, 2009. The Company will recognize revenue from this agreement over its 17-year patent useful life.

#### 4. INVESTMENT IN JOINT VENTURE

On December 1, 2008, the Company and CHA Bio & Diostech Co., Ltd. ("CHA"), a leading Korean-based biotechnology company focused on the development of stem cell technologies, formed an international joint venture. The new company, Stem Cell & Regenerative Medicine International, Inc. ("SCRMI"), will develop human blood cells

and other clinical therapies based on the Company's hemangioblast program, one of the Company's core technologies. Under the terms of the agreement, the Company purchased upfront a 33% interest in the joint venture, and will receive another 7% interest upon fulfilling certain obligations under the agreement over a period of 3 years. The Company's contribution includes (a) the uninterrupted use of a portion of its leased facility at the Company's expense, (b) the uninterrupted use of certain equipment in the leased facility, and (c) the release of certain of the Company's research and science personnel to be employed by the joint venture. In return, for a 67% interest, CHA has agreed to contribute \$150,000 cash and to fund all operational costs in order to conduct the hemangioblast program.

The Company has agreed to collaborate with the joint venture in securing grants to further research and development of its technology. Additionally, SCRMI has agreed to pay the Company a fee of \$500,000 for an exclusive, worldwide license to the Hemangioblast Program. The Company has recorded \$7,353 in license fee revenue for the three months ended March 31, 2009 in its accompanying consolidated statements of operations, and the balance of unamortized license fee of \$491,422 has been accrued in deferred revenue in the accompanying consolidated balance sheet at March 31, 2009.

Accounting Principles Board Opinion 18 The Equity Method of Accounting for Investments in Common Stock ("APB 18"), paragraph 19a requires that the difference between the cost of an investment and the amount of underlying equity in net assets of an investee should be accounted for as if the investee were a consolidated subsidiary. The Company has calculated the difference between the cost of the investment and the amount of underlying equity in net assets of the joint venture to be \$196,130, based on the Company's initial cost basis in the investment of \$246,130, less its 33.3% of the initial equity in net assets of the joint venture of \$50,000. The Company will amortize the \$196,130 over the term of the shorter of the equipment usage or lease term (through April 2010, or 17 months from December 1, 2008). The amortization will be applied against the value of the Company's investment. Amortization expense for the three months ending March 31, 2009 was \$46,149.

The following table is a summary of key financial data for the joint venture as of and for the year ended March 31, 2009:

Current assets	\$ 46,255
Noncurrent assets	\$ 477,695
Current liabilities	\$ 205,827
Noncurrent liabilities	\$ 461,600
Net revenue	\$ 7,350
Net loss	\$ (285,379)

The following table is a summary of the activity from December 31, 2008 to March 31, 2009 in the Company's investment in the joint venture:

Balance, December 31, 2008	\$ 225,200
Losses attributable to investment	(95,126)
Amortization of premium	(46,149)
Balance, March 31, 2009	\$ 83,925

#### 5. CONVERTIBLE NOTE PAYABLE—APRIL 2008

On April 4, 2008, the Company entered into a Securities Purchase Agreement with accredited investors for the issuance of an aggregate of \$4,038,880 principal amount of senior secured convertible debentures with an original issue discount of \$820,648 representing approximately 20.32%. The amortizing senior secured convertible debentures issued at the closing of the 2008 financing will be due and payable one (1) year from the closing, and will not bear interest. The cash purchase price excluding refinancing of bridge debt and in-kind payments was \$2,212,432. Refinanced bridge debt consisted of the aggregate \$130,000 in unsecured convertible notes previously issued and sold to PDPI LLC and The Shapiro Family Trust on March 21, 2008. The net outstanding amount of principal plus interest of the Notes was converted into the debt within the April 2008 debenture on a dollar-for-dollar basis. Dr. Shapiro, one of the Company's directors, may be deemed the beneficial owner of the securities owned by The Shapiro Family Trust. The convertible debentures are convertible at the option of the holders beginning on the six-month anniversary of the effective date into 26,206,333 and 5,396,500 shares of common stock at a fixed conversion price of \$0.15 per share and \$0.02 per share, respectively, subject to anti-dilution and other customary

adjustments. The Company has classified the note as short term in the accompanying consolidated balance sheet as of December 31, 2008. The debenture contains no restrictions as to the use of the proceeds, and is intended to fund the Company's working capital obligations. As of July 15, 2009, the entire debenture balance remains outstanding.

Under the terms of the agreements, principal amounts owed under the debentures become due and payable commencing six months following closing of the transaction. At that time, and each month thereafter, the Company is required to either repay 1/30 of the outstanding balance owed in common stock at the lesser of the then conversion price or 80% of the weighted average price for common shares for the 10 trading days prior to the amortization payment date. The debenture agreement does not limit the number of shares that the Company could be required to issue.

The note contains a provision that modifies the conversion rate to \$0.15 per common share and the warrant exercise price to \$0.165 per common share, issued to the April 2008 note payable subscribers who are also participants in the 2005, 2006, and 2007 debentures. The Company concluded that the change in conversion price and warrant exercise price did not constitute a significant change in the nature of the debt and that the transaction should not be treated as an extinguishment of that debt.

In connection with this financing, the Company accrued cash fees to a placement agent of \$20,000 and issued warrants to purchase 26,925,867 shares of Common Stock at an exercise price of \$0.165 per share. The term of the warrants is five years and is subject to anti-dilution and other customary adjustments. The initial fair value of the warrants was estimated at \$2,587,521 using the Black-Scholes pricing model. The Company issued warrants to purchase an aggregate of 4,263,962 shares of common stock of the Company at an exercise price of \$0.165 to T.R. Winston & Company, LLC as consideration for placement agent services provided in connection with the Debenture. The term of the warrants is five years and is subject to anti-dilution and other customary adjustments. The initial fair value of the warrants was estimated at \$412,732 using the Black-Scholes pricing model. The total of 31,189,829 warrants were again valued at \$3,193,108 at March 31, 2009 at fair value using the Black-Scholes model, representing an increase in the fair value of the liability of \$2,371,065 during the three months ended March 31, 2009, which was recorded through the results of operations as an adjustment to fair value of derivatives. The assumptions used in the Black-Scholes option pricing model at April 4, 2008 for all warrants issued in connection with this Debenture are as follows: (1) dividend yield of 0%; (2) expected volatility of 145%, (3) risk-free interest rate of 2.63%, and (4) expected life of 5.0 years. The assumptions used in the Black-Scholes option pricing model at March 31, 2009 for all warrants issued in connection with this Debenture are as follows: (1) dividend yield of 0%; (2) expected volatility of 190%, (3) risk-free interest rate of 0.17%, and (4) expected life of 4.01 years. Cash fees accrued in the amount of \$20,000, the initial fair value of the original issue discount in the amount of \$820,649, and the initial fair value of the warrant discount in the amount of \$3,000,253 were capitalized as debt issuance costs (cash paid) and debt discounts (original issue discount and warrant discount), respectively, and were amortized in full during the year ended December 31, 2008 due to the August 6, 2008 default as discussed below.

Under the terms of the agreement, beginning October 1, 2008, the Company is to amortize the note resulting in complete repayment by the maturity date. The Company may make the amortization payment in either cash or equity. If the payment is made in common stock, the stock will be issued at a price per share equal to the lesser of (i) the then conversion price, and (ii) 80% of the weighted average price for common shares for the 10 trading days prior to the amortization payment date. As of March 31, 2009, no note amortization had occurred and the note was in default, effective August 6, 2008, as discussed below.

The agreement entered into provides that the Company will pay certain cash amounts as liquidated damages in the event that the Company does not maintain an effective registration statement, or if the Company fails to timely execute stock trading activity. Additionally, penalties will be incurred by the Company in the event of potential default conditions.

As long as any portion of this debenture remains outstanding, unless the holders of at least 67% in principal amount of the then outstanding debentures otherwise give prior written consent, the Company is not permitted to (a) guarantee or borrow any indebtedness, (b) enter into any liens, (c) amend its charter documents in any manner that materially and adversely affects any rights of the holders, (d) acquire more than a de minimis number of shares of its common stock equivalents other than as to conversion shares of warrant shares as permitted or required and repurchases of common stock or common stock equivalents of departing officers and directors of the Company, provided that such purchases do not exceed certain specified amounts, (e) repay any indebtedness, other than the debentures already issued on a pro-rata basis, other than regularly scheduled principle payments as such terms are in effect under this debenture, (f) pay cash dividends or distributions on any equity securities of the Company, (g) enter into any material transaction with any affiliate of the Company, unless such transaction is made on an arm's-length basis, or (h) enter into any agreement with respect to any of the above.

The Company has complied with the provisions of FAS 155 "Accounting for Certain Hybrid Financial Instruments", and recorded the fair value of the convertible debentures and related embedded conversion option. The initial fair value of the debentures and embedded conversion option was valued using a combination of Binomial and Black-Scholes models, resulting in a fair value of \$4,570,649 at April 4, 2008. The convertible debenture is convertible at the option of the holders into a total of 31,602,833 shares, subject to anti-dilution and other customary adjustments. The excess of \$531,769 of this value over the face value of the note was recorded through the results of operations as charges related to issuance of April 2008 convertible note payable. The fair value of the debentures and embedded conversion option was \$4,541,625 at March 31, 2009, which includes the face value of the note of \$4,038,880, plus the \$502,745 fair value of the embedded conversion option. The embedded conversion option was valued using the Black-Scholes option pricing model. The assumptions used in the Black-Scholes option pricing model at March 31, 2009 are as follows: (1) dividend yield of 0%; (2) expected volatility of 190%, (3) risk-free interest rate of 0.17%, and (4) expected life of 0.01 years. The decrease in fair value of the embedded conversion option of \$1,893 is recorded through the results of operations as an adjustment to the fair value of derivatives for the three months ended March 31, 2009. Additionally, \$477,013 was recorded in loss on modification of convertible debenture during the three months ended March 31, 2009 as a result of a settlement with a debenture holder in February 2009. See Note 13.

At March 31, 2009, the note and related embedded derivatives outstanding were again valued at fair value using a binomial option pricing model, resulting in the changes shown in the following table in the fair values of the respective liabilities versus the values at December 31, 2008. The changes were recorded through the results of operations as an adjustment to fair value of derivatives.

	March 31,	December 31,	Increase		
	2009	2008	(Decrease)		
Principal Due	\$ 4,038,880	\$ 4,038,880	\$ -		
Fair Value	\$ 4,541,625	\$ 4,066,505	\$ 475,120		

Interest expense on the April 2008 debenture for the three months ended March 31, 2009 and 2008 was \$179,260 and \$0, respectively.

On August 6, 2008, the Company issued a moratorium on amortization of all outstanding debentures. Under the terms of the debenture agreements, the moratorium constitutes an event of default and thus the debentures all incur default interest penalties. As a result of the default, the Company has recognized additional penalty interest, and has recognized the remaining balance of its debt discounts associated with this note in interest expense, and classified the entire balance as short term. See Note 10 for the total default interest expense recognized during the three months ended March 31, 2009.

#### 6. CONVERTIBLE NOTES PAYABLE—FEBRUARY 2008

The Company issued and sold a \$600,000 unsecured convertible note dated as of February 15, 2008 ("Note A") to JMJ Financial, for a net purchase price of \$500,000 (reflecting a 16.66% original issue discount) in a private placement. Note A bears interest at the rate of 12% per annum, and is due by February 15, 2010. At any time after the 180th day following the effective date of Note A, the holder may at its election convert all or part of Note A plus accrued interest into shares of the Company's common stock at the conversion rate of the lesser of: (a) \$0.38 per share, or (b) 80% of the average of the three lowest trade prices in the 20 trading days prior to the conversion. Pursuant to the Use of Proceeds Agreement entered into in connection with the issuance of Note A, the Company is required to use the proceeds from Note A solely for research and development dedicated to adult stem cell research.

Effective February 15, 2008, in exchange for \$1,000,000 in the form of a Secured & Collateralized Promissory Note (the "JMJ Note") issued by JMJ Financial to the Company, the Company issued and sold an unsecured convertible note ("Note B") to JMJ Financial in the aggregate principal amount of \$1,200,000 or so much as may be paid towards the balance of the JMJ Note. Note B bears interest at the rate of 10% per annum, and is due by February 15, 2010. At any time following the effective date of Note B, the holder may at its election convert all or part of Note B plus accrued interest into shares of the Company's common stock at the conversion rate of the lesser of: (a) \$0.38 per share, or (b) 80% of the average of the three lowest trade prices in the 20 trading days prior to the conversion. In connection with the issuance of Note B, the Company entered into a Collateral and Security Agreement dated as of February 15, 2008 with JMJ Financial pursuant to which the Company granted JMJ Financial a security interest in certain of its assets securing the JMJ Note. As of March 31, 2009, the Company had drawn down and received the following amounts under Note B:

- On March 17, 2008 \$60,000 for a net purchase price of \$50,000 (reflecting a 16.66% original issue discount).
- On June 17, 2008 \$60,000 for a net purchase price of \$50,000 (reflecting a 16.66% original issue discount).

As long as any portion of this debenture remains outstanding, unless the holders of at least 67% in principal amount of the then outstanding debentures otherwise give prior written consent, the Company is not permitted to (a) guarantee or borrow any indebtedness, (b) enter into any liens, (c) amend its charter documents in any manner that materially and adversely affects any rights of the holders, (d) acquire more than a de minimis number of shares of its common stock equivalents other than as to conversion shares of warrant shares as permitted or required and repurchases of common stock or common stock equivalents of departing officers and directors of the Company, provided that such purchases do not exceed certain specified amounts, (e) repay any indebtedness, other than the debentures already issued on a pro-rata basis, other than regularly scheduled principle payments as such terms are in effect under this debenture, (f) pay cash dividends or distributions on any equity securities of the Company, (g) enter into any material transaction with any affiliate of the Company, unless such transaction is made on an arm's-length basis, or (h) enter into any agreement with respect to any of the above.

The debenture agreement does not limit the number of shares that the Company could be required to issue. The convertible debenture is convertible at the option of the holders into a total of 10,384,615 shares of common stock at a conversion price of \$0.069 per share at March 31, 2009, subject to anti-dilution and other customary adjustments. The conversion options included in Note A and Note B represent embedded derivative instruments. Accordingly, the Company has complied with the provisions of FAS 155 "Accounting for Certain Hybrid Financial Instruments". The fair values of Note A and Note B and the related embedded derivatives, valued using a Monte Carlo simulation model, were recorded as of February 15, 2008. The excess of these values over the face values of Note A and Note B was recorded through the results of operations as charges related to the issuance of the February 2008 convertible notes payable. The fair value of the debentures and embedded conversion options was \$1,530,483 at March 31, 2009, which includes the face value of the debentures of \$720,000, plus the \$810,483 fair value of the embedded conversion options. The embedded conversion options were valued using the Black-Scholes option pricing model. The assumptions used in the Black-Scholes option pricing model at March 31, 2009 are as follows: (1) dividend yield of 0%; (2) expected volatility of 190%, (3) risk-free interest rate of 0.57%, and (4) expected life of 0.88 years. The decrease in fair value of the embedded conversion option of \$226,987 is recorded through the results of operations as an adjustment to the fair value of derivatives for the three months ended March 31, 2009.

The following table summarizes the changes in the fair values of the respective liabilities versus the values at March 31, 2009 and December 31, 2008.

	N	Tarch 31, December 31, 2009 2008		*	Increase (Decrease)	
Note A:						
Principal Due	\$	600,000	\$	600,000	\$	-
Fair Value		1,275,402		1,464,558		(189,156)
Note B:						
Principal Due	\$	120,000	\$	120,000	\$	-
Fair Value		255,081		292,912		(37,831)
Total Increase (Decrease)					\$	(226,987)

Interest expense on the February 2008 debenture for the three months ended March 31, 2009 was \$31,956.

On August 6, 2008, the Company issued a moratorium on amortization of all outstanding debentures. Under the terms of the debenture agreements, the moratorium constitutes an event of default and thus the debentures all incur default interest penalties. As a result of the default, the Company has recognized additional penalty interest, and has recognized the remaining balance of its debt discounts associated with this note in interest expense, and classified the entire balance as short term. See Note 10 for the total default interest expense recognized during the three months ended March 31, 2009.

#### 7. CONVERTIBLE DEBENTURES—2007

On August 31, 2007, to fund its continuing operations, the Company entered into a Securities Purchase Agreement with accredited investors for the issuance of an aggregate of \$12,550,000 principal amount of convertible debentures with an original issue discount of \$2,550,000 representing approximately 20.3%. In connection with the closing of the sale of the debentures, the Company received gross proceeds of \$10,000,000. The convertible debentures are convertible at the option of the holders into 36,911,765 shares of common stock at a fixed conversion price of \$0.34 per share, subject to anti-dilution and other customary adjustments. In connection with the Securities Purchase Agreement, the Company also issued warrants to purchase an aggregate of 54,905,483 shares of its common stock. The term of the warrants is five years and the exercise price is \$0.38 per share, subject to anti-dilution and other customary adjustments. The conversion price and warrant exercise price have each been modified for those subscribers who also participated in the April 2008 convertible note. See Note 5. The investors have contractually agreed to restrict their ability to convert the convertible debentures, exercise the warrants and exercise the additional investment right and receive shares of the Company's common stock such that the number of shares of the Company's common stock held by them and their affiliates after such conversion or exercise does not exceed 4.99% of the Company's then issued and outstanding shares of its common stock.

The April 2008 note (see Note 5) contains a provision that modifies the conversion rate to \$0.15 per common share and the warrant exercise price to \$0.165 per common share, issued to the April 2008 debenture subscribers who are also participants in the 2007 debentures. The Company concluded that the change in conversion price and warrant exercise price did not constitute a significant change in the nature of the debt and that the transaction should not be treated as an extinguishment of that debt. As a result of the change in the exercise price of the warrants, 2,399,264 warrants remained at \$0.38 exercise price and the remaining 34,512,501 warrants were adjusted to the \$0.165 exercise price as a result of participation in the April 2008 debenture. The convertible debentures are convertible at the option of the holders into 1,999,387; 38,471,546; and 14,434,550 shares of common stock at a fixed conversion price of \$0.34 per share, \$0.15 per share, and \$0.02 per share, respectively, subject to anti-dilution and other customary

adjustments. See Note 5.

The agreements entered into provide that the Company will pay certain cash amounts as liquidated damages in the event that the Company does not maintain an effective registration statement, or if the Company fails to timely execute stock trading activity.

Under the terms of the agreements, principal amounts owed under the debentures become due and payable commencing six months following closing of the transaction. At that time, and each month thereafter, the Company is required to either repay 1/30 of the outstanding balance owed in common stock at the lesser of \$0.34 per share or 80% of the prior ten day's average closing stock price, immediately preceding the redemption. The agreements also provide that the Company may force conversion of outstanding amounts owed under the debentures into common stock, if the Company has met certain conditions and milestones, and additionally, has a stock price for 20 consecutive trading days that exceeds 200% of the conversion price. The debenture agreement does not limit the number of shares that the Company could be required to issue.

As long as any portion of this debenture remains outstanding, unless the holders of at least 67% in principal amount of the then outstanding debentures otherwise give prior written consent, the Company is not permitted to (a) guarantee or borrow any indebtedness, (b) enter into any liens, (c) amend its charter documents in any manner that materially and adversely affects any rights of the holders, (d) acquire more than a de minimis number of shares of its common stock equivalents other than as to conversion shares of warrant shares as permitted or required and repurchases of common stock or common stock equivalents of departing officers and directors of the Company, provided that such purchases do not exceed certain specified amounts, (e) pay cash dividends or distributions on any equity securities of the Company, (f) enter into any material transaction with any affiliate of the Company, unless such transaction is made on an arm's-length basis, or (g) enter into any agreement with respect to any of the above.

The agreement included an embedded conversion option, and the Company has complied with the provisions of FAS 155 "Accounting for Certain Hybrid Financial Instruments", and recorded the fair value of the convertible debentures, and the related embedded derivatives, as of August 31, 2007. The fair value of the debentures and embedded conversion option was \$11,275,803 at March 31, 2009, which includes the face value of the debentures of \$6,739,215, plus the \$4,536,588 fair value of the embedded conversion option. The embedded conversion option was valued using the Black-Scholes option pricing model. The assumptions used in the Black-Scholes option pricing model at March 31, 2009 are as follows: (1) dividend yield of 0%; (2) expected volatility of 190%, (3) risk-free interest rate of 0.57%, and (4) expected life of 1.42 years. The increase (decrease) in the fair value of the embedded conversion option of \$2,495,186 and (\$217,489), respectively, is recorded through the results of operations as an adjustment to the fair value of derivatives for the three months ended March 31, 2009 and 2008, respectively. Additionally, \$1,319,355 was recorded in loss on modification of convertible debenture during the three months ended March 31, 2009 as a result of a settlement with a debenture holder in February 2009. See Note 13.

In connection with this financing, the Company paid cash fees to a placement agent of \$1,001,800 and issued a warrant to purchase 6,328,890 shares of common stock at an exercise price of \$0.38 per share (modified to \$0.165 for holders who are also subscribers of the April 2008 note payable – see Note 5). The initial fair value of the warrant was estimated at \$2,025,000 using the Black-Scholes pricing model. The broker-dealer warrants were again valued at March 31, 2009 at fair value using the Black-Scholes model, resulting in an increase in the fair value of the liability for the three months ended March 31, 2009 and 2008 of \$470,153 and \$51,623, respectively, which was recorded through the results of operations as an adjustment to fair value of derivatives. The assumptions used in the Black-Scholes model at March 31, 2009 are as follows: (1) dividend yield of 0%; (2) expected volatility of 190%, (3) risk-free interest rate of 1.15%, and (4) expected life of 3.42 years. Cash fees paid, and the initial fair value of the warrant, were capitalized on the date of the note, and were amortized in full during the year ended December 31, 2008 due to the August 6, 2008 default as discussed below.

The following table summarizes the 2007 Convertible Debentures and discounts outstanding at March 31, 2009 and December 31, 2008:

	]	March 31, December 31,		Increase		
		2009		2008	(.	Decrease)
Principal Due	\$	6,739,215	\$	6,984,297	\$	(245,082)
Fair Value	\$	11,275,803	\$	7,706,344	\$	3,569,459

Interest expense on the 2007 debenture for the three months ended March 31, 2009 was \$232,932.

On August 6, 2008, the Company issued a moratorium on amortization of all outstanding debentures. Under the terms of the debenture agreements, the moratorium constitutes an event of default and thus the debentures all incur default interest penalties. As a result of the default, the Company has recognized additional penalty interest, and has recognized the remaining balance of its debt discounts associated with this note in interest expense, and classified the entire balance as short term. See Note 10 for the total default interest expense recognized during the three months ended March 31, 2009.

#### 8. CONVERTIBLE DEBENTURES—2006

On September 6, 2006, to fund its continuing operations, the Company entered into a Securities Purchase Agreement with accredited investors for the issuance of an aggregate of \$10,981,250 principal amount of convertible debentures with an original issue discount of \$2,231,250 representing approximately 20.3%. In connection with the closing of the sale of the debentures, the Company received gross proceeds of \$8,750,000. The Company may make the amortization payment in either cash or equity. If the payment is made in common stock, the stock will be issued at a price per share equal to the lesser of (i) the then conversion price, and (ii) 70% of the weighted average price for common shares for the 10 trading days prior to the amortization payment date. The debenture agreement does not limit the number of shares that the Company could be required to issue. In connection with the issuance of the debenture, the Company also issued warrants to purchase 19,064,670 shares of common stock at an initial price of \$0.3168 per share (modified to \$0.165 for holders who are also subscribers of the April 2008 note payable – see Note 5) and exercisable for five years. The warrants were valued using the Black-Scholes option pricing model. The assumptions used in the Black-Scholes option pricing model at March 31, 2009 are as follows: (1) dividend yield of 0%; (2) expected volatility of 190%, (3) risk-free interest rate of 0.81%, and (4) expected life of 2.44 years. The increase in the fair value of the warrants of \$1,304,254 is recorded through the results of operations as an adjustment to the fair value of derivatives for the three months ended March 31, 2009, respectively.

The agreement included an embedded conversion option, and the Company has complied with the provisions of FAS 155 "Accounting for Certain Hybrid Financial Instruments", and recorded the fair value of the convertible debentures, and related embedded derivatives, as of September 6, 2006. The fair value of the debentures and embedded conversion option was \$2,164,019 at March 31, 2009, which includes the face value of the debentures of \$1,854,875, plus the \$309,144 fair value of the embedded conversion option. The embedded conversion option was valued using the Black-Scholes option pricing model. The assumptions used in the Black-Scholes option pricing model at March 31, 2009 are as follows: (1) dividend yield of 0%; (2) expected volatility of 190%, (3) risk-free interest rate of 0.43%, and (4) expected life of 0.44 years. The increase (decrease) in fair value of the embedded conversion option of \$257,385 and (\$484,305) is recorded through the results of operations as an adjustment to the fair value of derivatives for the three months ended March 31, 2009 and 2008, respectively.

As long as any portion of this debenture remains outstanding, unless the holders of at least 67% in principal amount of the then outstanding debentures otherwise give prior written consent, the Company is not permitted to (a) guarantee or borrow any indebtedness, (b) enter into any liens, (c) amend its charter documents in any manner that materially and adversely affects any rights of the holders, (d) acquire more than a de minimis number of shares of its common stock equivalents other than as to conversion shares of warrant shares as permitted or required and repurchases of common stock or common stock equivalents of departing officers and directors of the Company, provided that such purchases do not exceed certain specified amounts, (e) pay cash dividends or distributions on any equity securities of the

Company, or (f) enter into any agreement with respect to any of the above.

The April 2008 note (see Note 5) contains a provision that modifies the conversion rate to \$0.15 per common share and the warrant exercise price to \$0.165 per common share, issued to the April 2008 note payable subscribers who are also participants in the 2006 debentures. The Company concluded that the change in conversion price and warrant exercise price did not constitute a significant change in the nature of the debt and that the transaction should not be treated as an extinguishment of that debt. As a result of the change in the exercise price of the warrants, 6,572,626 warrants remained at the \$0.3168 exercise price and the remaining 12,492,044 warrants were adjusted to the \$0.165 exercise price upon participation in the April 2008 debenture. The convertible debentures are convertible at the option of the holders into 3,866,563 and 4,942,035 shares of common stock at a fixed conversion price of \$0.288 per share and \$0.15 per share, respectively, subject to anti-dilution and other customary adjustments. See Note 5.

The following table summarizes the 2006 Convertible Debentures and discounts outstanding at March 31, 2009 and December 31, 2008:

	N	March 31,		cember 31,	I	Increase	
		2009		2008	$(\Gamma$	Decrease)	
Principal Due	\$	1,854,875	\$	1,941,595	\$	(86,720)	
Fair Value	\$	2,164,019	\$	1,993,354	\$	170,665	

In connection with this financing, the Company paid cash fees to a broker-dealer of \$525,000 and issued a warrant to purchase 4,575,521 shares of common stock at an exercise price of \$0.3168 per share (modified for holders who are also subscribers of the April 2008 note payable – see Note 5). The broker-dealer warrants were again valued at March 31, 2009 at fair value using the Black-Scholes model. The increase (decrease) in the fair value of the liability of approximately \$293,471 and (\$80,731) for the three months ended March 31, 2009 and 2008, respectively, was recorded through the results of operations as an adjustment to fair value of derivatives. The assumptions used in the Black-Scholes model at March 31, 2009 are as follows: (1) dividend yield of 0%; (2) expected volatility of 190%, (3) risk-free interest rate of 0.81%, and (4) expected life of approximately 2.5 years. Cash fees paid, and the initial fair value of the warrant, were capitalized on the date of the note, and were amortized in full during the year ended December 31, 2008 due to the August 6, 2008 default as discussed below.

Interest expense for the three months ended March 31, 2009 was \$58,909, respectively.

On August 6, 2008, the Company issued a moratorium on amortization of all outstanding debentures. Under the terms of the debenture agreements, the moratorium constitutes an event of default and thus the debentures all incur default interest penalties. As a result of the default, the Company has recognized additional penalty interest, and has recognized the remaining balance of its debt discounts associated with this note in interest expense, and classified the entire balance as short term. See Note 10 for the total default interest expense recognized during the three months ended March 31, 2009.

#### 9. CONVERTIBLE DEBENTURES—2005

On September 15, 2005, to fund its continuing operations, the Company entered into a Securities Purchase Agreement with accredited investors for the issuance of an aggregate of \$22,276,250 principal amount of convertible debentures with an original issue discount of \$4,526,250 representing approximately 20.3%. In connection with the closing of the sale of the debentures, the Company received gross proceeds of \$17,750,000. The Company may make the amortization payment in either cash or equity, beginning six months from the closing date of this debenture. If the payment is made in common stock, the stock will be issued at a price per share equal to the lesser of (i) the then conversion price, and (ii) 85% of the weighted average price for common shares for the 10 trading days prior to the amortization payment date. The debenture agreement does not limit the number of shares that the Company could be required to issue.

The agreement included a an embedded conversion option that required separate valuation in accordance with the requirements of FAS 133, EITF –00-27 and related accounting literature. The fair value at March 31, 2009 of the derivative for the conversion feature was valued as an American call option using the Black-Scholes option pricing model with the following inputs: (1) closing stock price from \$0.11 (2) exercise price equal to the \$0.15 and \$0.34 conversion prices (3) volatility based upon the Company's stock trading of 190% (4) risk-free interest rate of 0.43%, and (5) expected life of 0.75 years.

During the three months ended March 31, 2009 and 2008, respectively, an increase (decrease) in the fair value of the embedded derivative amounts of approximately \$15,868 and (\$98,453), respectively, was recorded through results of operations as adjustment to fair value of derivatives.

In connection with this financing, we paid cash fees to a broker-dealer of \$1,065,000 and issued a warrant to purchase 1,623,718 shares of Common Stock at an exercise price of \$0.165 per share. The fair value of the warrant as of March 31, 2009 was estimated at approximately \$149,213 using the Black-Scholes pricing model. The assumptions used in the Black-Scholes model are as follows: (1) dividend yield of 0%; (2) expected volatility of 190%, (3) risk-free interest rate of 0.81%, and (4) expected life of 2.46 years. Cash fees paid, and the fair value of the warrant, have been capitalized as debt issuance costs and are being amortized over 36 months, and as redemptions occur the Company writes off the proportional amount of the original deferred issuance cost to interest expense.

In January 2007, the Company's Board of Directors agreed to reduce the exercise price of the warrants issued in connection with the 2005 debentures to \$0.95 per share and to reduce the conversion price of the debentures to \$0.90 per share. The conversion price and warrant exercise price have each been further modified in April 2008 for those subscribers who also participated in the April 2008 convertible note. See Note 5.

#### **Anti-dilution Impact**

As a result of the 2007 and April 2008 Financings, described more fully in Notes 5 and 7, the exercise prices of certain of the warrants issued in connection with the 2005 Financing were automatically diluted down to \$0.34 and \$0.165. The result of this was to impact both the number and price of the original warrants and replacement warrants issued to both the investors and the brokers.

The number of original warrants issued to investors totaled 2,335,005. The warrants were again valued at March 31, 2009 at fair value using the Black-Scholes model. The increase (decrease) in the fair value of the liability was \$110,554 and (\$14,607) for the three months ended March 31, 2009 and 2008, respectively, which was recorded through the results of operations as adjustments to fair value of derivatives. The assumptions used in the Black-Scholes model to value the warrants at March 31, 2009 were as follows: (1) dividend yield of 0%; (2) expected volatility of 190%, (3) risk-free interest rate of 0.57%, and (4) expected life of 1.25 years.

The new number of replacement warrants issued to investors and brokers totaled 12,689,966. The warrants were again valued at March 31, 2009 at fair value using the Black-Scholes model. The increase (decrease) in the fair value of the liability of was \$843,893 and (\$44,200) for the three months ended March 31, 2009 and 2008, respectively, which was recorded through the results of operations as adjustments to fair value of derivatives. The assumptions used in the Black-Scholes model are as follows: (1) dividend yield of 0%; (2) expected volatility of 190%, (3) risk-free interest rate of 0.81%, and (4) expected life of 2.46 years.

The April 2008 note (see Note 5) contains a provision that modifies the conversion rate to \$0.15 per common share and the warrant exercise price to \$0.165 per common share, issued to the April 2008 note payable subscribers who are also participants in the 2006 debentures. The Company concluded that the change in conversion price and warrant exercise price did not constitute a significant change in the nature of the debt and that the transaction should not be treated as an extinguishment of that debt. As a result of the change in the exercise price of the warrants, 1,793,364 original warrants remained at the \$0.34 exercise price and the remaining 541,641 original warrants were adjusted to the \$0.165 exercise price upon participation in the April 2008 debenture. Further, 3,239,810 replacement warrants remained at the \$0.34 exercise price and the remaining 9,450,156 replacement warrants were adjusted to the \$0.165 exercise price upon participation in the April 2008 debenture. The convertible debentures are convertible at the option of the holders into 159,951 and 237,056 shares of common stock at a fixed conversion price of \$0.34 per share and \$0.15 per share, respectively, subject to anti-dilution and other customary adjustments. See Note 5.

The following table summarizes the 2005 Convertible Debentures and embedded derivatives outstanding at March 31, 2009 and December 31, 2008:

			De	ecember		
	M	arch 31,		31,	Ir	ncrease
		2009		2008	(D	ecrease)
Principal Due	\$	81,922	\$	81,922	\$	-
Fair Value	\$	101,865	\$	85,997	\$	15,868

Interest expense for the three months ended March 31, 2009 was \$3,636.

On August 6, 2008, the Company issued a moratorium on amortization of all outstanding debentures. Under the terms of the debenture agreements, the moratorium constitutes an event of default and thus the debentures all incur default interest penalties. As a result of the default, the Company has recognized additional penalty interest, and has recognized the remaining balance of its debt discounts associated with this note in interest expense, and classified the entire balance as short term. See Note 10 for the total default interest expense recognized during the three months ended March 31, 2009.

### 10. ACCRUED DEFAULT INTEREST

On August 6, 2008, the Company issued a moratorium on amortization of all outstanding debentures at June 30, 2008. As of March 31, 2009, the moratorium remains in effect. Under the terms of the debenture agreements, the moratorium constitutes an event of default and thus the debentures all incur default interest penalties. The debenture agreements require in the event of default that the full principle amount of the debentures, together with other amounts owing in respect thereof, to the date of acceleration shall become, at the Holder's election, immediately due and payable in cash. The aggregate amount payable upon event of default shall be equal to the mandatory default amount. The mandatory default amount equals the sum of (i) the greater of: (A) 120% of the principle amount of the debentures to be repaid plus 100% of the accrued and unpaid interest, or (B) the principle amount of the debentures to be repaid, divided by the conversion price on (x) the date the mandatory default amount came due or (y) the date the mandatory default amount is paid in full, whichever is less, multiplied by the closing price on (x) the date the mandatory default amount is demanded or otherwise due or (y) the date the mandatory default amount is paid in full, whichever is greater, and (ii) all other amounts, costs, expenses and liquidated damages due in respect to the debentures. Commencing 5 days after the occurrence of any event of default that results in the eventual acceleration of the debentures, the interest rate on the debentures shall accrue at the rate of 18% per annum. Further, as a result of the default, during 2008 the Company recognized the remaining balance of its debt discounts associated with this note in interest expense, and classified the entire balance in short term at March 31, 2009 and December 31, 2008, respectively. The following table summarizes the accrued default interest expense recognized in the accompanying consolidated balance sheets at March 31, 2009 and December 31, 2008, respectively:

	March 31, 2009	De	ecember 31, 2008
2005 debenture	\$ 25,757	\$	22,121
2006 debenture	583,193		524,284
2007 debenture	2,118,883		1,885,951
February 2008 debenture	226,376		194,420
April 2008 debenture	1,269,868		1,090,608
	\$ 4,224,077	\$	3,717,384

#### 11. WARRANT SUMMARY

## Warrant Activity

A summary of warrant activity for the three months ended March 31, 2009 is presented below:

	Weighted						
		Weighted Average Exercise Price		Average	Aggregate Intrinsic		
				Remaining			
	Number of			Contractual Life (in		Value	
	Warrants			years)	(000)		
Outstanding, December 31, 2008	129,397,951	\$	0.26	3.23	\$	-	
Granted	-		-				
Exercised	-		-				
Forfeited	(211,000)	\$	1.44				
Outstanding, March 31, 2009	129,186,951	\$	0.27	2.99		-	
Vested and expected to vest at March 31,							
2009	129,186,951	\$	0.27	2.99		-	
Exercisable, March 31, 2009	129,186,951	\$	0.27	2.99		-	

The aggregate intrinsic value in the table above is before applicable income taxes and is calculated based on the difference between the exercise price of the warrants and the quoted price of the Company's common stock as of the reporting date.

The following table summarizes information about warrants outstanding and exercisable at March 31, 2009:

Warrants Outstanding					Warrants Exercisable			
		Weighted	Weighted			We	eighted	
		Average	Average			A	verage	
Exercise	Number	Remaining	Exercise		rcise Number		Exercise	
Price	of Shares	Life (Years)	Price		Price of Shares		Price	
\$ 0.17	95,630,311	3.25	\$	0.17	95,630,311	\$	0.17	
0.32	11,148,147	2.44		0.32	11,148,147		0.32	
0.34	8,753,762	1.48		0.34	8,753,762		0.34	
0.38 - 0.40	5,902,908	4.08		0.39	5,902,908		0.39	
0.85 - 0.96	5,734,831	1.71		0.95	5,734,831		0.95	
2.20	72,917	2.38		2.20	72,917		2.20	
2.48 - 2.54	1,944,075	0.71		2.54	1,944,075		2.54	

#### 12. ADJUSTMENT TO FAIR VALUE OF DERIVATIVES

The following table summarizes the components of the adjustment to fair value of derivatives which were recorded as charges to results of operations for the three months ended March 31, 2009 and 2008. The table summarizes by category of derivative liability the increase (decrease) in fair value from market changes during the three months ended March 31, 2009 and 2008, the impact of additional investments and repricing and exercise of certain warrants.

	March 31, 2009			rch 31, 2008
Embedded Pipe derivatives - 9.05	\$	15,868	\$	89,548
Pipe Hybrid instrument – 9.06		257,385		414,842
Pipe Hybrid- FAS 155 – 8.07		2,495,186		217,498
Pipe Hybrid- February 2008		(226,987)		63,362
Pipe Hybrid- April 2008		(1,893)		-
Original warrants PIPE 2005, excluding replacement warrants		110,554		14,607
Replacement Warrants		843,893		44,202
Warrants – PIPE 2006-investors		1,304,254		80,731
Warrants – PIPE 2007-investors		2,656,542		(51,623)
Warrants – PIPE 2008-investors		2,371,065		-
Other Warrant Derivatives- 2005 and 2006		781,735		123,471
Other Warrants Derivatives - 2007		234,010		23,633
	\$	10,841,612	\$	1,020,271

### 13. STOCKHOLDERS' EQUITY TRANSACTIONS

The Company is authorized to issue two classes of capital stock, to be designated, respectively, Preferred Stock and Common Stock. The total number of shares of Preferred Stock the Company is authorized to issue is 50,000,000 par value \$0.001 per share. The total number of shares of Common Stock the Company is authorized to issue is 500,000,000, par value \$0.001 per share. The Company had no Preferred Stock outstanding as of March 31, 2009 and had 499,905,641 shares of Common Stock outstanding as of March 31, 2009.

Between September 29, 2008 and January 20, 2009, the Company was ordered by the Circuit Court of the Twelfth Judicial District Court for Sarasosa County, Florida to settle certain past due accounts payable, for previous professional services and other operating expenses incurred, by the issuance of shares of its common stock. In aggregate, through March 31, 2009, the Company settled \$1,108,673 in accounts payable through the issuance of 260,116,283 shares of its common stock. During the three months ended March 31, 2009, the Company settled \$505,199 in accounts payable through the issuance of 39,380,847 shares of its common stock. The Company recorded a loss on settlement of \$4,793,949 in its accompanying statements of operations for the three months ended March 31, 2009. The losses were calculated as the difference between the amount of accounts payable relieved and the value of the shares (based on the closing share price on the settlement date) that were issued to relieve the accounts payable.

On March 5, 2009, the Company settled a lawsuit originally brought by an investor in January 2009, who is an investor in the 2007 and 2008 debentures, and associated with the default on August 6, 2008 on all debentures. As a result of the lawsuit, the Company was required by court order to reduce the conversion price on convertible debentures held by this investor to \$0.02 per share, effective immediately, so long as the Company has a sufficient number of authorized shares to honor the request for conversion. During the three months ended March 31, 2009, the Company issued 4,847,050 shares of its common stock to this investor in conversion of approximately \$97,000 of its 2006 debenture at \$0.02 per share, and 1,252,950 shares of its common stock to this investor in conversion of approximately \$25,000 of its 2007 debenture at \$0.02 per share. The Company has considered the impact of Emerging Issue Task Force statements, or EITFs 96 - 19— Debtor's Accounting for a Modification or Exchange of Debt Instruments, 06-6— Debtor's Accounting for a Modification (or Exchange) of Convertible Debt Instruments on the accounting treatment of the change in conversion price of the 2007 and 2008 Convertible Debentures. EITF 96 - 19 states that a transaction resulting in a significant change in the nature of a debt instrument should be accounted for as an extinguishment of debt. The Company calculated the fair value of the conversion option for the 2007 and April 2008 debentures immediately prior to and after the change in the conversion price, and evaluated the impact of the change in conversion price. The Company has concluded that the change in conversion price for this investor constitutes a substantial modification in the terms of the 2007 and 2008 debenture agreements, Based on the Company's evaluation, the below table summarizes the impact relative to the Debentures' face value on March 5, 2009.

	Debenture								
Impact on Debentures		Change	F	ace Value	% Change				
2007 Debenture	\$	1,319,354	\$	6,739,214	20%				
April 2008 Debenture	\$	477.014	\$	4.038.880	12%				

The change in fair value of the conversion option on the 2007 debenture was \$1,319,355, or a 20% change relative to the face value of the debenture. The change in fair value of the conversion option on the April 2008 debenture was \$477,014, or a 12% change relative to the face value of the debenture. The Company recorded a loss on modification of debentures in the amount of \$1,796,368 during the three months ended March 31, 2009 as a result of this modification.

Effective March 3, 2009, the Company entered into a \$5 million credit facility ("Facility") with a life sciences fund. Under the terms of the agreement, the Company may draw down funds, as needed, from the investor through the issuance of Series A-1 convertible preferred stock, par value \$.001, at a basis of 1 share of Series A-1 convertible preferred stock for every \$10,000 invested. The preferred stock pays dividends, in kind of preferred stock, at an annual rate of 10%, matures in four years from the initial drawdown date, and is convertible into common stock at \$0.75 per share. Upon the earlier of (i) the fourth anniversary of the issuance date, and (ii) the occurrence of a major transaction, each holder shall have the right, at such holder's option, to require the Company to redeem all or a portion of such holder's share of Series A-1 preferred stock, at a price per share equal to the Series A-1 liquidation value. A major transaction includes (i) the consolidation, merger, or other business combination of the Company with or into another entity, (ii) the sale or transfer of more than 50% of the Company's assets other than inventory in the ordinary course of business in one or more related series of transactions, or (iii) closing of a purchase, tender or exchange offer made to the holders of more than 50% of the outstanding shares of common stock in which more than 50% of the outstanding shares of common stock were tendered and accepted. Company shall have the right, at the Company's option, to redeem all or a portion of the shares of Series A-1 preferred stock, at any time at a price per share of Series A-1 preferred stock equal to 100% of the Series A-1 liquidation value. In the event the closing price of the our common stock during the 5 trading days following the put notice falls below 75% of the average of the closing bid price in the 5 trading days prior to the put closing date, the investor may, at its option, and without penalty, decline to purchase the applicable put shares on the put closing date. We may terminate this agreement and our right to initiate future draw-downs by providing 30 days advanced written notice to the investor. Upon any liquidation, dissolution or winding up of the Company, whether voluntary or involuntary, after payment or provision for payment of debts and other liabilities of the Corporation, before any distribution or payment shall be made to the holders of any other equity

securities of the Company by reason of their ownership thereof, the holders of the Series A-1 preferred stock shall first be entitled to be paid out of the assets of the Company available for distribution to its stockholders an amount with respect to each share of Series A-1 preferred stock equal to \$10,000, plus any accrued by unpaid dividends. If, upon dissolution or winding up of the Company, the assets of the Company shall be insufficient to make payment in full to all holders, then such assets shall be distributed among the holders at the time outstanding, ratably in proportion to the full amounts to which they would otherwise be respectively entitled. As of March 31, 2009, the Company has not drawn down any money on this credit facility and thus the balance was zero. As of June 30, 2009, the Company had drawn down approximately \$1,810,000 on this credit facility.

For providing investor relations services in connection with the Series A-1 convertible preferred stock credit facility, the Company issued a consultant 24,900,000 shares of its common stock on February 9, 2009. The Company valued the issuance of these shares at \$4,731,000 based on a closing price of \$0.19 on February 9, 2009 and recorded the value of the shares as deferred financing costs associated with the financing on the date they were issued. Beginning on the date of the first draw-down on April 6, 2009 (the loan maturity date is 4 years after the initial draw-down), each quarter the Company will amortize the deferred issuance costs using the effective interest method. No interest expense was incurred during the three months ended March 31, 2009.

#### STOCK-BASED COMPENSATION

#### Stock Plans

14.

On August 12, 2004, ACT's Board of Directors approved the establishment of the 2004 Stock Option Plan (the "2004 Stock Plan"). Stockholder approval was received on December 13, 2004. The total number of common shares available for grant and issuance under the plan may not exceed 2,800,000 shares, subject to adjustment in the event of certain recapitalizations, reorganizations and similar transactions. Common stock purchase options may be exercisable by the payment of cash or by other means as authorized by the Board of Directors or a committee established by the Board of Directors. At March 31, 2009, the Company had granted 890,000 common share purchase options under the plan. At March 31, 2009, there were 1,910,000 options available for grant under this plan.

On December 13, 2004, ACT's Board of Directors and stockholders approved the establishment of the 2004 Stock Option Plan II (the "2004 Stock Plan II"). The total number of common shares available for grant and issuance under the plan may not exceed 1,301,161 shares, subject to adjustment in the event of certain recapitalizations, reorganizations and similar transactions. Common stock purchase options may be exercisable by the payment of cash or by other means as authorized by the Board of Directors or a committee established by the Board of Directors. At March 31, 2009, ACT had granted 1,191,161 common share purchase options under the plan. At March 31, 2009, there were 110,000 options available for grant under this plan.

On January 31, 2005, the Company's Board of Directors approved the establishment of the 2005 Stock Incentive Plan (the "2005 Plan") for its employees, subject to approval of our shareholders. The total number of common shares available for grant and issuance under the plan may not exceed 9 million shares, plus an annual increase on the first day of each of the Company's fiscal years beginning in 2006 equal to 5% of the number of shares of our common stock outstanding on the last day of the immediately preceding fiscal year, subject to adjustment in the event of certain recapitalizations, reorganizations and similar transactions. On January 24, 2008, the Company's shareholders approved an increase of 25,000,000 shares to the 2005 Plan. Common stock purchase options may be exercisable by the payment of cash or by other means as authorized by the Board of Directors or a committee established by the Board of Directors. At March 31, 2009, the Company had granted 11,676,601 common stock purchase options and 1,497,263 shares of common stock under the plan. At March 31, 2009, there were 34,160,649 options available for grant under this plan.

#### **Stock Option Activity**

A summary of option activity for the three months ended March 31, 2009 is presented below:

				Weighted		
		W	eighted	Average	Aggı	regate
		Α	verage	Remaining	Intr	insic
	Number of E		xercise	Contractual	Va	ılue
	Options	Price		Life (in years)	(000)	
Outstanding, January 1, 2009	14,127,690	\$	0.51	7.71	\$	-
Granted	2,878,072	\$	0.79			
Exercised	-		-			
Forfeited	(3,248,000)	\$	0.60			
Outstanding, March 31, 2009	13,757,762	\$	0.54	7.00	\$	53
Vested and expected to vest at March 31, 2009	13,222,547	\$	0.55	6.94	\$	53
Exercisable, March 31, 2009	9,640,720	\$	0.68	6.31	\$	53

The aggregate intrinsic value in the table above is before applicable income taxes and is calculated based on the difference between the exercise price of the options and the quoted price of the Company's common stock as of the reporting date.

A summary of the status of unvested employee stock options as of March 31, 2009 and changes during the period then ended, is presented below:

		Weig	ghted
		Ave	rage
		Grant	t Date
		Fair \	Value
	Shares	Per S	Share
Unvested at January 1, 2009	5,909,272	\$	0.24
Granted	2,878,072		0.79
Vested	(3,016,716)		0.75
Forfeited	(1,653,586)		0.29
Unvested at March 31, 2009	4,117,042	\$	0.22

As of March 31, 2009, total unrecognized stock-based compensation expense related to nonvested stock options was approximately \$747,000, which is expected to be recognized over a weighted average period of approximately 8.82 years.

The following table summarizes information about stock options outstanding and exercisable at March 31, 2009.

	(	Options Outstanding			Options Exe	ercisable	
		Weighted	Weighted		-	$W\epsilon$	eighted
		Average	A	verage		Av	verage
Exercise	Number	Remaining	Exercise		Number	Ex	xercise
Price	of Shares	Life (Years)	Price		of Shares	F	Price
\$ 0.05	890,000	5.37	\$	0.05	890,000	\$	0.05
0.21	5,751,669	8.61		0.21	1,690,043		0.21
0.25	1,191,161	5.76		0.25	1,191,161		0.25
0.85	5,204,515	5.84		0.85	5,152,016		0.85
1.35	150,000	7.06		1.35	150,000		1.35
2.04 - 2.11	130,000	6.78		2.06	127,083		2.05
2.20 - 2.48	440,417	6.43		2.27	440,417		2.27
	13,757,762				9,640,720		

#### 15. COMMITMENTS AND CONTINGENCIES

The Company entered into a lease for office and laboratory space in Worcester, Massachusetts commencing December 2004 and expiring April 2010, and for office space in Los Angeles, California commencing November 2005 and expiring May 2008. The Company's rent at its Los Angeles, California site was on a month-to-month basis after May 2008. On March 1, 2009, the Company vacated its site in Los Angeles, California and moved to another site in Los Angeles. The term on this new lease is through February 28, 2010. Monthly base rent is \$2,170. Annual minimum lease payments are as follows:

Year 1	\$ 271,754
Year 2	20,850
Total	\$ 292,604

Rent expense recorded in the financial statements for the three months ended March 31, 2009 and 2008 was approximately \$115,000 and \$411,000, respectively.

On March 5, 2009, the Company settled a lawsuit originally brought by an investor in January 2009, who is an investor in the 2007 and 2008 debentures, and associated with the default on August 6, 2008 on all debentures. As a result of the lawsuit, the Company was required by court order to reduce the conversion price on convertible debentures held by this investor to \$0.02 per share, effective immediately, so long as the Company has a sufficient number of authorized shares to honor the request for conversion. See Note 13.

We have entered into employment contracts with certain executives and research personnel. The contracts provide for salaries, bonuses and stock option grants, along with other employee benefits. The employment contracts generally have no set term and can be terminated by either party. There is a provision for payments of three months to one year of annual salary as severance if we terminate a contract without cause, along with the acceleration of certain unvested stock option grants.

The Company and its subsidiary Mytogen, Inc. are currently defending themselves against a civil action brought in Suffolk Superior Court, No. 09-442-B, by their former landlord at 79/96 Thirteenth Street, Charlestown, Massachusetts, a property vacated by the Company and Mytogen effective May 31, 2008. In that action, Alexandria Real Estate-79/96 Charlestown Navy Yard ("ARE") is alleging that it has been unable to relet the premises and therefore seeking rent for the vacated premises since September 2008. Alexandria is also seeking certain clean-up and storage expenses. The Company is vigorously defending itself against the suit, claiming that ARE had breached certain

convenants as of when Mytogen vacated, and that had ARE used reasonable diligence in its efforts to secure a new tenant, it would have been more successful. No trial date has been set. At this time, management cannot determine the likelihood of an unfavorable outcome from this lawsuit, and thus no amount has been accrued in its financial statements at March 31, 2009. If the Company does not prevail in these proceedings, losses for unpaid rents and other fees could be within a range between \$3.5 million and \$4.5 million.

# 16. INCOME TAXES

The Company adopted the provisions of FASB Interpretation No. 48, Accounting for Uncertainty in Income Taxes ("FIN 48"), on January 1, 2007. FIN 48 prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. FIN 48 also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure, and transition. Due to the fact that the Company has substantial net operating loss carryforwards, adoption of FIN 48 had no impact on the Company's beginning retained earnings, balance sheets, or statements of operations.

The Company files income tax returns in the U.S. federal jurisdiction, and various states and foreign jurisdictions. With few exceptions, the Company is no longer subject to U.S. federal, state and local income tax examinations by tax authorities for years before 2001.

The Company recognizes accrued interest and penalties on unrecognized tax benefits in income tax expense. The Company did not have any unrecognized tax benefits as of March 31, 2009 and 2008. As a result, the Company did not recognize interest expense, and additionally, did not record any penalties during the three and nine months ended March 31, 2009 and 2008. The Company does not expect that the amounts of unrecognized tax benefits will change significantly within the next 12 months.

# 17. SUBSEQUENT EVENTS

Subsequent to March 31, 2009, the Company drew down approximately \$1,810,000 on its preferred stock credit facility. See Note 13.

On June 30, 2009, Alpha Capital submitted a conversion notice in the principle amount of \$150,000 into 7,500,000 shares of common stock at \$0.02 per share. The Company did not have sufficient authorized shares to satisfy this conversion notice. On July 6, 2009, by means of a settlement between the 2 parties, the Company agreed to deliver the 7,500,000 shares of its common stock no later than September 25, 2009. Further, the Company agreed to provide Alpha Capital with an additional \$110,000 Debenture, which is to be upon the same terms and conditions as the April 2008 Debenture.

#### CHA Bio & Diostech Co., Ltd.

On March 30, 2009, the Company entered into a second license agreement with CHA under which the Company will license its RPE technology, for the treatment of diseases of the eye, to CHA for development and commercialization exclusively in Korea. The Company is eligible to receive up to a total of \$1.9 million in fees based upon the parties achieving certain milestones, including the Company making an IND submission to the US FDA to commence clinical trials in humans using the technology. The Company received an up-front fee under the license in the amount of \$1,100,000. Under the agreement, CHA will incur all of the costs associated with the RPA clinical trials in Korea.

On May 13, 2009, the Company entered into a third license agreement with CHA under which the Company will license its proprietary "single blastomere technology," which has the potential to generate stable cell lines, including RPE for the treatment of diseases of the eye, for development and commercialization exclusively in Korea. The Company received an upfront license fee of \$300,000 in May 2009.

# Report of Independent Registered Public Accounting Firm

To the Board of Directors Advanced Cell Technology, Inc. Los Angeles, CA

We have audited the accompanying consolidated balance sheets of Advanced Cell Technology, Inc and subsidiary as of December 31, 2008 and 2007, and the related consolidated statements of operations, stockholders' deficit and cash flows for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Advanced Cell Technology Inc. and subsidiary as of December 31, 2008 and 2007, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has suffered recurring net losses from operations, negative cash flows from operations, a substantial stockholders' deficit and its total liabilities exceeds its total assets. This raises substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

We were not engaged to examine management's assessment of the effectiveness of Advanced Cell Technology, Inc. and subsidiary's internal control over financial reporting as of December 31, 2008, included in the accompanying Management's Report on Internal Control over Financial Reporting and, accordingly, we do not express an opinion thereon.

/s/ SingerLewak LLP

Los Angeles, California July 2, 2009

# ADVANCED CELL TECHNOLOGY, INC. AND SUBSIDIARY CONSOLIDATED BALANCE SHEETS AS OF DECEMBER 31, 2008 AND 2007

	D	ecember 31, 2008	D	ecember 31, 2007
ASSETS				(restated)
1.002.10				
CURRENT ASSETS:				
Cash and cash equivalents	\$	816,904	\$	1,166,116
Accounts receivable		261,504		27,026
Prepaid expenses		32,476		68,416
Deferred royalty fees, current portion		182,198		341,274
Total current assets		1,293,082		1,602,832
Property and equipment, net		400,008		914,504
Investment in joint venture		225,200		714,504
Deferred royalty fees, less current portion		659,488		1,202,430
Deposits		057,400		115,192
Deferred issuance costs, net of amortization of \$8,666,387 and \$3,874,300		_		4,772,087
Deferred issuance costs, net of unfortization of \$0,000,507 and \$5,071,500				1,772,007
TOTAL ASSETS	\$	2,577,778	\$	8,607,045
LIABILITIES AND STOCKHOLDERS' DEFICIT				
CURRENT LIABILITIES:				
Accounts payable	\$	8,287,786	\$	5,517,876
Accrued expenses		2,741,591		1,120,781
Accrued default interest		3,717,384		-
Deferred revenue, current portion		834,578		497,374
Advances payable - other		130,000		130,000
2005 Convertible debenture and embedded derivatives, net of discounts of \$0 and				
\$600,246		85,997		1,276,871
2006 Convertible debenture and embedded derivatives (fair value \$1,993,354 and		1 002 254		1 (05 007
\$3,939,862)		1,993,354		1,625,327
2007 Convertible debenture and embedded derivatives (fair value \$7,706,344 and \$3,874,026)		7,706,344		1,160,847
February 2008 Convertible debenture and embedded derivatives (fair value		7,700,544		1,100,047
\$1,757,470 and \$0)		1,757,470		_
April 2008 Convertible debenture and embedded derivatives (fair value		1,737,470		
\$4,066,505 and \$0)		4,066,505		_
Warrant and option derivatives, current portion		2,655,849		14,574
Deferred joint venture obligations, current portion		167,335		- 11,571
Short term capital leases		12,955		31,605
Notes payable, other		468,425		468,425
Total current liabilities		34,625,573		11,843,680
		, - <del>,</del> - , - , -		, , , , , , ,
2006 Convertible debenture and embedded derivatives, less current portion (fair				
value \$0 and \$3,447,230)		-		1,422,164

2007 Convertible debenture and embedded derivatives, less current portion (fair		
value \$0 and \$7,748,052)	-	2,321,695
Warrant and option derivatives, less current portion	-	13,011,751
Deferred joint venture obligations, less current portion	63,473	-
Deferred revenue, less current portion	3,817,716	1,534,485
Total liabilities	38,506,762	30,133,775
Commitments and contingencies	-	-
STOCKHOLDERS' DEFICIT:		
Preferred stock, \$0.001 par value; 50,000,000 shares authorized, 0 issued and		
outstanding	-	-
Common stock, \$0.001par value; 500,000,000 shares authorized, 429,448,381		
and 85,027,461 issued and outstanding	429,448	85,027
Additional paid-in capital	53,459,172	34,302,334
Accumulated deficit	(89,817,604)	(55,914,091)
Total stockholders' deficit	(35,928,984)	(21,526,730)
TOTAL LIABILITIES AND STOCKHOLDERS' DEFICIT	\$ 2,577,778	\$ 8,607,045

The accompanying notes are an integral part of these consolidated financial statements.

# ADVANCED CELL TECHNOLOGY, INC. AND SUBSIDIARY CONSOLIDATED STATEMENTS OF OPERATIONS FOR THE YEARS ENDED DECEMBER 31, 2008 AND 2007

		2008	(re	2007 estated)
Revenue (License fees and royalties)	\$	787,106	\$	647,349
Cost of Revenue	Ψ	765,769	Ψ	428,913
Gross profit		21,337		218,436
Gloss profit		21,337		210,130
Operating expenses:				
Research and development		8,635,577		12,744,913
In-process R&D expense - Mytogen		-		4,094,736
Grant reimbursements		(105,169)		(67,179)
General and administrative expenses		5,009,418		6,781,705
Total operating expenses		13,539,826		23,554,175
Loss from operations		(13,518,489)		(23,335,739)
-				
Non-operating income (expense):		7.022		162 001
Interest income		7,933		162,091
Interest expense and late fees		(26,614,761)		(21,023,663)
Finance cost		(806,079)		(15,400)
Charges related to issuance of 2008 convertible debentures		(1,217,342)		- (2.051.656)
Charges related to issuance of 2007 convertible debenture and warrants		-		(3,871,656)
Charges related to repricing of 2005 convertible debenture and warrants		-		(843,277)
Income related to repricing of 2006 and 2007 convertible debentures and		0.47. 500		
warrants		847,588		-
Adjustments to fair value of derivatives		13,082,247		32,835,057
Losses attributable to equity method investment		(20,930)		-
Loss on disposal of fixed assets		(227,543)		102.062
Gain (loss) on settlement		(5,436,137)		193,862
Total non-operating income (expense)		(20,385,024)		7,437,014
Loss before income tax		(33,903,513)		(15,898,725)
Income tax		-		-
Net loss	\$	(33,903,513)	\$	(15,898,725)
YYY 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
Weighted average shares outstanding:		0.45.050.105		(1 117 (10
Basic		245,279,135		61,115,618
Diluted		245,279,135		61,115,618
Loss per share:				
Basic	\$	(0.14)	\$	(0.26)
Diluted	\$	(0.14)	\$	(0.26)
~ 1100 A	Ψ	(0.11)	Ψ	(0.20)

The accompanying notes are an integral part of these consolidated financial statements.

# ADVANCED CELL TECHNOLOGY, INC. AND SUBSIDIARY CONSOLIDATED STATEMENTS OF STOCKHOLDERS' DEFICIT FOR THE YEARS ENDED DECEMBER 31, 2008 AND 2007

	Common Shares	Common Stock ures Amount		Additional Paid in Capital		Accumulated Deficit		Total tockholders' Deficit
Balance December 31, 2006 (Restated)	39,318,070		39,318	12,291,873		(40,015,366)		(27,684,175)
Convertible debentures redemptions	19,243,386		19,243	6,879,914		_		6,899,157
Convertible debentures conversions	16,625,579		16,626	11,069,317		-		11,085,943
Issuance of stock in payment of board fees	35,909		36	20,716		-		20,752
Option compensation charges	-		-	531,113		-		531,113
Issuance of stock in payment of license fees	800,000		800	607,200				608,000
Issuance of stock in payment of employee bonuses	515,000		515	406,335				406,850
Issuance of stock to employees	340,000		340	16,660		-		17,000
Issuance of stock in payment of legal fees	85,000		85	67,915				68,000
Issuance of stock in acquisition of Mytogen	9,064,517		8,064	2,411,291		-		2,419,355
Net loss for the year ended December 31, 2007 (Restated)	-		-	-		(15,898,725)		(15,898,725)
Balance December 31, 2007 (Restated)	85,027,461	\$	85,027	\$ 34,302,334	\$	(55,914,091)	\$	(21,526,730)
Convertible debentures redemptions	65,463,111		65,463	5,390,989		-		5,456,452
Convertible debentures conversions	39,741,987		39,743	6,121,900				6,161,643
	14,710,329		14,710	791,369		-		806,079

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Issuance of stock for debenture financing costs					
Option compensation charges	-	-	527,243	-	527,243
Adjustment to fair value of derivatives	-	-	78,367	-	78,367
Issuance in respect of anti-dilution provision of convertible debenture	70,503	71	15,510	-	15,581
Issuance of stock in payment of professional fees	1,002,291	1,002	212,847	-	213,849
Issuance of stock in settlement of accounts payable	220,735,436	220,735	5,818,877	-	6,039,612
Issuance of stock under stock incentive plan	1,497,263	1,497	140,936	-	142,433
Issuance of stock upon exercise of options	1,200,000	1,200	58,800	-	60,000
Net loss for the year ended December 31, 2008	-	-	-	(33,903,513)	(33,903,513)
Balance December 31, 2008	429,448,381	\$ 429,448	\$ 53,459,172	\$ (89,817,604)	\$ (35,928,984)

The accompanying notes are an integral part of these consolidated financial statements

# ADVANCED CELL TECHNOLOGY, INC. AND SUBSIDIARY CONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2008 AND 2007

2008 2007

(restated)

CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	\$ (33,903,513)	\$ (15,898,725)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	402,867	386,643
Write-off of uncollectible accounts receivable	30,782	-
Amortization of deferred charges	702,018	407,391
Amortization of deferred revenue	(798,310)	(497,349)
Stock based compensation	889,269	531,113
Amortization of deferred issuance costs	4,792,087	3,874,300
Amortization of discounts	17,871,392	17,052,016
Gain on extinguishment of debt	-	(193,862)
Adjustements to fair value of derivatives	(13,082,247)	(32,835,057)
Charges related to issuance of February 2008 convertible notes	685,573	-
Mytogen acquisition	-	4,094,736
Charges related to issuance of April 2008 convertible notes	531,769	-
Charges related to issuance of 2007 convertible debentures	-	3,871,656
Repricing of 2005 convertible debentures and warrants	-	843,277
Repricing of 2006 and 2007 convertible debentures and warrants	(847,588)	-
Shares of common stock issued for professional services	759,496	1,307,828
Shares of common stock issued for board fees	-	20,752
Shares of common stock issued for financing costs	806,079	-
Warrants issued for consulting services	155,281	-
Charges related to settlement of anti-dilution provision	15,581	-
Forfeiture of rent deposits	88,504	-
Loss on disposal of fixed assets	227,543	-
Loss on settlement of litigation	5,436,138	-
Loss attributable to investment in joint venture	20,930	-
Amortization of deferred joint venture obligations	(15,322)	-
(Increase) / decrease in assets:		
Accounts receivable	(265,260)	39,293
Prepaid expenses	35,940	42,812
Deferred charges	-	(55,000)
Increase / (decrease) in current liabilities:		
Accounts payable and accrued expenses	5,355,228	976,712
Interest Payable	3,722,198	-
Deferred revenue	3,418,745	-
Net cash used in operating activities	(2,964,820)	(16,031,464)
CASH FLOWS FROM INVESTING ACTIVITIES		
Purchases of property and equipment	(174,514)	(158,522)
Return of deposits	-	18,649

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Net cash used in investing activities	(174,514)	(139,873)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from exercise of stock options	-	17,000
Proceeds from issuance of convertible notes, net of cost	2,182,432	8,848,200
Payments on convertible debentures	-	(139,123)
Payments on notes and leases	(18,650)	(77,960)
Proceeds from notes payable	630,000	-
Payment for issuance costs on note payable	(3,660)	-
Net cash provided by financing activities	2,790,122	8,648,117
NET DECREASE IN CASH AND CASH EQUIVALENTS	(349,212)	(7,523,220)
CASH AND CASH EQUIVALENTS, BEGINNING BALANCE	1,166,116	8,689,336
CASH AND CASH EQUIVALENTS, ENDING BALANCE	\$ 816,904	\$ 1,166,116
CASH PAID FOR:		
Interest	\$ -	\$ 10,016
Income taxes	\$ 1,549	\$ -
SUPPLEMENTAL DISCLOSURE OF NON-CASH FINANCING ACTIVITIES:		
Issuance of 65,463,111 and 19,243,386 shares of common stock in redemption of		
convertible debentures	\$ 5,456,452	\$ 7,038,000
Issuance of 39,741,987 and 16,625,579 shares of common stock in conversion of		
convertible debentures	\$ 6,161,643	\$ 8,391,000
Issuance of 70,503 shares of common stock to settle an anti-dilution provision		
feature of convertible debenture	\$ 15,581	\$ -
Issuance of 1,200,000 shares of common stock upon exercise of employee stock		
options	\$ 60,000	\$ -
Issuance of 220,735,436 shares of common stock in settlement of litigation	\$ 6,039,612	\$ -
Issuance of 35,909 shares of common stock in payment of board fees	\$	\$ 21,000
Issuance of 800,000 shares of common stock in payment of license fees	\$	\$ 608,000
Issuance of 515,000 shares of common stock in payment of employee bonuses	\$	\$ 407,000
Issuance of 85,000 shares of common stock in settlement of legal fees	\$	\$ 68,000
Issuance of 8,064,517 shares of common stock in acquisition of Mytogen	\$ -	\$ 2,419,000

The accompanying notes are an integral part of these consolidated financial statements.

# ADVANCED CELL TECHNOLOGY, INC. AND SUBSIDIARY NOTES TO CONSOLIDATED FINANCIAL STATEMENTS December 31, 2008 and 2007

#### ORGANIZATIONAL MATTERS

#### Organization

1.

On January 31, 2005, Advanced Cell Technology, Inc. (formerly known as A.C.T. Holdings, Inc.) (the "Company") completed a merger with Advanced Cell, Inc. (formerly known as Advanced Cell Technology, Inc.), a Delaware corporation ("ACT"), pursuant to which a wholly-owned subsidiary of the Company merged with and into ACT, with ACT remaining as the surviving corporation and a wholly-owned subsidiary of the Company. Upon the completion of the merger, the Company ceased all of its pre-merger operations and adopted the business of ACT.

Prior to the merger, the Company had minimal business, operations, revenues and assets, and had been involved in an industry entirely unrelated to the business of ACT. Therefore, the acquisition of ACT by the Company represented a complete change in the nature of the Company's business and operations, and changed the nature of any prior investment in the Company.

The transaction has been accounted for as a recapitalization of ACT, the accounting acquirer. The historical financial statements presented for periods prior to the merger are those of ACT.

On November 18, 2005, a majority of the Company's stockholders approved the reincorporation of the Company from the state of Nevada to the state of Delaware pursuant to a merger of the Company with and into a newly formed Delaware corporation, followed by a "roll up" merger to combine the operating subsidiary with the Company.

#### Nature of Business

The Company is a biotechnology company focused on developing and commercializing human embryonic and adult stem cell technology in the emerging fields of regenerative medicine. Principal activities to date have included obtaining financing, securing operating facilities, and conducting research and development. The Company has no therapeutic products currently available for sale and does not expect to have any therapeutic products commercially available for sale for a period of years, if at all. These factors indicate that the Company's ability to continue its research and development activities is dependent upon the ability of management to obtain additional financing as required.

# Going Concern

As reflected in the accompanying financial statements, the Company has losses from operations, negative cash flows from operations, a substantial stockholders' deficit and current liabilities exceed current assets. The Company may thus not be able to continue as a going concern and fund cash requirements for operations through the next 12 months with current cash reserves. As discussed below, the Company was able to raise additional cash in the second half of 2008 and the first quarter of 2009. Notwithstanding success in raising capital, there continues to be substantial doubt about the Company's ability to continue as a going concern.

In view of the matters described in the preceding paragraph, recoverability of a major portion of the recorded asset amounts shown in the accompanying consolidated balance sheet is dependent upon continued operations of the Company, which, in turn, is dependent upon the Company's ability to continue to raise capital and ultimately generate positive cash flows from operations. The financial statements do not include any adjustments relating to the

recoverability and classification of recorded asset amounts or amounts and classifications of liabilities that might be necessary should the Company be unable to continue its existence.

Management has taken or plans to take the following steps that it believes will be sufficient to provide the Company with the ability to continue in existence:

- On April 4, 2008, the Company released closing escrow on the issuance of \$4,038,880 of its amortizing senior secured convertible debentures and associated warrants. The purchasers purchased from the Company senior secured convertible debentures and warrants to purchase shares of the Company's common stock. The net cash and cash in-kind received by the Company related to this financing was \$2,212,432.
- On April 30, 2008 the Company received a one time payment of \$300,000 from Terumo International which extended their ability to commence a Phase I Clinical Trial in Japan by one year.
- On May 31, 2008, the Company closed its Alameda, California and Charlestown, Massachusetts facilities in an effort to streamline and focus on its most advanced clinical programs as part of a cost reduction program designed to reduce annual operating expenses by \$5-6 million. In conjunction with the cost reduction activities, the Company has not renewed its Alameda, California sublease and has vacated its Charlestown, Massachusetts facility.
- On June 17, 2008, the Company drew down \$60,000 and received \$50,000 (reflecting a 16.66% original issue discount) under Note B described in Note 8 to the financial statements.
- On July 10, 2008, the Company granted an exclusive license to Embryome Sciences, Inc., a wholly owned subsidiary of BioTime, Inc., to use its "ACTCellerate" embryonic stem cell technology and a bank of over 140 diverse progenitor cell lines derived using that technology. Under the agreement, the Company received an up-front payment of \$470,000, and is eligible to receive an 8% royalty on sales of products, services, and processes that utilize the licensed technology. However, as discussed in more detail in Note 18, in connection with unpaid rents ordered to be paid to a landlord, the Company has assigned the landlord rights and interest to 62.5% of all royalties on this contract, and 65% of all other consideration payable under this license agreement until such time that the Company has repaid amounts owed to the landlord that total \$475,000.
- Between September 29, 2008 and January 20, 2009, the Company settled certain past due accounts payable by the issuance of shares of its common stock. In aggregate, the Company settled \$1,108,673 in accounts payable through the issuance of 260,116,283 shares of its common stock.
- On December 1, 2008, the Company and CHA Bio & Diostech Co., Ltd. ("CHA"), a leading Korean-based biotechnology company focused on the development of stem cell technologies, formed an international joint venture. The new company, Stem Cell & Regenerative Medicine International, Inc. ("SCRMI"), will develop human blood cells and other clinical therapies based on the Company's hemangioblast program, one of the Company's core technologies. CHA has agreed to contribute \$150,000 cash and to fund operational costs in order to conduct the hemangioblast program. Additionally, SCRMI has agreed to pay the Company a fee of \$500,000 for an exclusive, worldwide license to the Hemangioblast Program. As of June 30, 2009, SCRMI has paid the Company the entire \$500,000 towards payment of the license fee. See Note 6 for additional details of the joint venture.
- On December 18, 2008, the Company entered into a license agreement with an Ireland-based investor, Transition Holdings Inc. ("Transition"), for certain of its non-core technology. Under the agreement, Transition agreed to acquire a license to the technology for \$3.5 million in cash. Through December 31, 2008, the Company had received \$2 million in cash under this agreement. As of June 30, 2009, the Company has received the entire \$3.5 million in cash under this agreement. The Company expects to apply the proceeds towards its retinal epithelium ("RPE") cells program.

- On March 30, 2009, the Company entered into a second license agreement with CHA under which the Company will license its retinal pigment epithelium ("RPE") technology, for the treatment of diseases of the eye, to CHA for development and commercialization exclusively in Korea. The Company is eligible to receive up to a total of \$1.9 million in fees based upon the parties achieving certain milestones, including the Company making an IND submission to the US FDA to commence clinical trials in humans using the technology. The Company received an up-front fee under the license in the amount of \$1,000,000 on April 1, 2009. Under the agreement, CHA will incur all of the costs associated with the RPA clinical trials in Korea. The agreement is part of continuing cooperation and collaboration between the two companies.
  - On March 11, 2009, the Company entered into a \$5 million credit facility ("Facility") with a life sciences fund. Under the agreement, the proceeds from the Facility must be used exclusively for the Company to file an investigational new drug ("IND") for its retinal pigment epithelium ("RPE") program, and will allow the Company to complete both Phase I and Phase II studies in humans. An IND is required to commence clinical trials. Under the terms of the agreement, the Company may draw down funds, as needed for clinical development of the RPE program, from the investor through the issuance of Series A-1 convertible preferred stock. The preferred stock pays dividends, in kind of preferred stock, at an annual rate of 10%, matures in four years from the initial issuance date, and is convertible into common stock at \$0.75 per share. As of June 30, 2009, the Company has drawn down approximately \$1,505,000 on this facility.
- On May 13, 2009, the Company entered into a third license agreement with CHA under which the Company will license its proprietary "single blastomere technology," which has the potential to generate stable cell lines, including RPE for the treatment of diseases of the eye, for development and commercialization exclusively in Korea. The Company received an upfront license fee of \$300,000.
- Management anticipates raising additional future capital from its current convertible debenture holders, or other financing sources, that will be used to fund any capital shortfalls. The terms of any financing will likely be negotiated based upon current market terms for similar financings. No commitments have been received for additional investment and no assurances can be given that this financing will ultimately be completed.
- Management has focused its scientific operations on product development in order to accelerate the time to market products which will ultimately generate revenues. While the amount or timing of such revenues cannot be determined, management believes that focused development will ultimately provide a quicker path to revenues, and an increased likelihood of raising additional financing.
- Management will continue to pursue licensing opportunities of the Company's extensive intellectual property portfolio.

#### 2. RESTATEMENT

As indicated in Notes 7 through 11, the Company has issued a series of complex convertible debentures over the past several years. The convertible debentures are issued for less than face value, thus generating significant original issue discounts. In conjunction with the instruments, the Company has issued substantial numbers of warrants, and the value of these warrants as of the issue date is treated in the same manner as an original issue discount. These discounts are amortized into interest expense over the life of the debenture, which is a complex calculation due to the planned monthly redemptions after a certain point included in the debenture agreements. Further, the Debentures are converted into shares at the holder's option, the timing of which depends on the price of the Company's stock. The Company also gives brokers and other intermediaries considerable value via cash and warrants in order to assist in selling the debentures. The costs associated with issuing the debt are capitalized and amortized over the life of the debt.

On September 6, 2006, the Company entered into a securities purchase agreement in which the purchasers purchased from the Company amortizing convertible debentures and warrants to purchase shares of the Company's common stock. In connection with that transaction, and for each quarter thereafter, the Company performed a valuation of the debentures and warrants (see Note 10).

On March 24, 2008, the Company discovered that it had been using an incorrect number of warrants in calculating the appropriate fair value. The Company had been using 4,541,672 warrants instead of the correct number of 19,064,670 warrants. Upon learning of the error, the Company recalculated the correct fair value and noted that this change in warrant valuation had no impact on the value of the related convertible debentures and all the related embedded derivatives.

In mid-May 2008, the Company discovered that the Deferred Issuance costs and discounts had been amortized over a period longer than the weighted average life of the instruments, with the result that the discounts and debt issuance costs should have been charged to interest expense on a faster basis than had been the case. Upon learning of the error the Company has recalculated the amortization and resulting interest expense. The Company also discovered that its calculation of the weighted average shares used in calculating basic and diluted earnings per share for the year ended December 31, 2007 was in error. The actual basic and diluted weighted average shares outstanding for the year ended December 31, 2007 was approximately 20,238,000 shares higher than reported.

In accordance with Statement of Accounting Standards No. 154, the Company has determined that these were errors, and has therefore restated the accompanying statements of operations, and cash flows for the year ended December 31, 2007 and the balance sheet as of December 31, 2007.

		s Originally Reported	Restated	Б	Difference
December 31, 2007					
Balance Sheet					
Deferred issuance costs	\$	5,107,599	\$ 4,772,087	\$	(335,512)
2005 Convertible debenture and embedded derivatives – curren	t				
portion	\$	1,040,156	\$ 1,276,871	\$	236,715
2006 Convertible debenture and embedded derivatives – curren	t				
portion	\$	906,860	\$ 1,625,327	\$	718,467
2007 Convertible debenture and embedded derivatives – curren	t				
portion	\$	363,805	\$ 1,160,847	\$	797,042

2006 Convertible debenture and embedded derivatives, less			
current portion	\$ 793,504	\$ 1,422,164	\$ 628,660
2007 Convertible debenture and embedded derivatives, less			
current portion	\$ 2,364,731	\$ 2,321,695	\$ (43,036)
Accumulated deficit	\$ (53,240,732)	\$ (55,914,091)	\$ (2,673,359)
Total stockholders' deficit at December 31, 2007	\$ (18,853,371)	\$ (21,526,730)	\$ (2,673,359)

	As Originally				
	Reported		Restated	]	Difference
V F 1 1 P 1 21 2007					
Year Ended December 31, 2007					
Statement of Operations					
Interest expense	\$ (18,350,304)	\$	(\$21,023,663)	\$	(2,673,359)
Net loss	\$ (13,225,366)				(2,673,359)
Basic and diluted loss per share	\$ (0.32)	\$	(0.26)	\$	(0.06)
Weighted average shares – basic and diluted	40,877,145		61,115,618		20,238,473
Statement of Cash Flows					
N . 1	ф. (12.225.266)	Φ	(15,000,705)	ф	(2 (72 250)
Net loss	\$ (13,225,366)		(15,898,725)	\$	(2,673,359)
Amortization of deferred issuance cost	\$ 3,538,788	\$	3,874,300	\$	335,512
Amortization of discount	\$ 14,714,169	\$	17,052,016	\$	2,337,847

### 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation—The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP").

Principles of Consolidation —The accounts of the Company and Mytogen, Inc. ("Mytogen") are included in the accompanying consolidated financial statements for the period from September 20, 2007 to December 31, 2007. On September 20, 2007, a newly formed subsidiary of the Company merged into Mytogen to effect a reorganization of Mytogen. As a result of the merger, the Company became the owner of 100% of the outstanding shares of Mytogen. During the period from September 20, 2007 to December 31, 2008, all intercompany balances and transactions were eliminated in consolidation.

Segment Reporting —SFAS No. 131, "Disclosure about Segments of an Enterprise and Related Information" requires use of the "management approach" model for segment reporting. The management approach model is based on the way a company's management organizes segments within the company for making operating decisions and assessing performance. The Company determined it has one operating segment. Disaggregation of the Company's operating results is impracticable, because the Company's research and development activities and its assets overlap, and management reviews its business as a single operating segment. Thus, discrete financial information is not available by more than one operating segment.

Use of Estimates —These consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States and, accordingly, require management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Specifically, the Company's management has estimated variables used to calculate the Black-Scholes and binomial lattice model calculations used to value derivative instruments as discussed below under "Fair Value Measurements". In addition, management has estimated the expected economic life and value of the Company's licensed technology, the Company's net operating loss for tax purposes, share-based payments for compensation to employees, directors, consultants and investment banks, and the useful lives of the Company's fixed assets and its accounts receivable allowance. Actual results could differ from those estimates.

Reclassifications—Certain prior year financial statement balances have been reclassified to conform to the current year presentation. These reclassifications had no effect on the recorded net loss.

Cash and Cash Equivalents —Cash equivalents are comprised of certain highly liquid investments with maturities of three months or less when purchased. The Company maintains its cash in bank deposit accounts, which at times, may exceed federally insured limits. The Company has not experienced any losses related to this concentration of risk. As of December 31, 2008 and 2007, the Company had deposits in excess of federally-insured limits totaling \$655,074 and \$965,042, respectively. The Company has not experienced any losses in such accounts.

Accounts Receivable —The Company periodically assesses its accounts receivable for collectability on a specific identification basis. Past due status on accounts receivable is based on contractual terms. If collectability of an account becomes unlikely, the Company records an allowance for that doubtful account. Once the Company has exhausted efforts to collect, management writes off the account receivable against the allowance it has already created. The Company does not require collateral for its trade accounts receivable.

Property and Equipment — The Company records its property and equipment at historical cost. The Company expenses maintenance and repairs as incurred. Upon disposition of property and equipment, the gross cost and accumulated depreciation are written off and the difference between the proceeds and the net book value is recorded as a gain or loss on sale of assets. In the case of certain assets acquired under capital leases, the assets are recorded net of imputed interest, based upon the net present value of future payments. Assets under capital lease are pledged as collateral for the related lease.

The Company provides for depreciation over the assets' estimated useful lives as follows:

Machinery & equipment 4 years Computer equipment 3 years Office furniture 4 years

Leasehold improvements Lesser of lease life or economic life Capital leases Lesser of lease life or economic life

Equity Method Investment — The Company follows Accounting Principles Board Opinion No. 18 The Equity Method of Accounting for Investments in Common Stock ("APB No. 18") in accounting for its investment in the joint venture. In the event the Company's share of the joint venture's net losses reduces the Company's investment to zero, the Company will discontinue applying the equity method and will not provide for additional losses unless the Company has guaranteed obligations of the joint venture or is otherwise committed to provide further financial support for the joint venture. If the joint venture subsequently reports net income, the Company will resume applying the equity method only after its share of that net income equals the share of net losses not recognized during the period the equity method was suspended.

Deferred Issuance Costs —Payments, either in cash or share-based payments, made in connection with the sale of debentures are recorded as deferred debt issuance costs and amortized using the effective interest method over the lives of the related debentures. The weighted average amortization period for deferred debt issuance costs is 36 months.

Intangible and Long-Lived Assets— The Company follows Statement of Financial Accounting Standards ("FAS") No. 144, "Accounting for Impairment of Disposal of Long-Lived Assets," which established a "primary asset" approach to determine the cash flow estimation period for a group of assets and liabilities that represents the unit of accounting for a long-lived asset to be held and used. Long-lived assets to be held and used are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. The carrying amount of a long-lived asset is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset. Long-lived assets to be disposed of are reported at the lower of carrying amount or fair value less cost to sell. During the years ended December 31, 2008 and 2007, no impairment

loss was recognized.

Fair Value Measurements — For certain financial instruments, including accounts receivable, accounts payable, accrued expenses, interest payable, advances payable and notes payable, the carrying amounts approximate fair value due to their relatively short maturities.

Emerging Issues Task Force ("EITF") No. 00-19 "Accounting for Derivative Financial Instruments Indexed to and Potentially Settled in, a Company's Own Stock" ("EITF 00-19"), provides a criteria for determining whether freestanding contracts that are settled in a company's own stock, including common stock options and warrants, should be designated as either an equity instrument, an asset or as a liability under SFAS No. 133 "Accounting for Derivative Instruments and Hedging Activities." Under the provisions of EITF 00-19, a contract designated as an asset or a liability must be carried at fair value on a company's balance sheet, with any changes in fair value recorded in a company's results of operations. Using the criteria in EITF 00-19, the Company has determined that its outstanding options and warrants require liability accounting and records the fair values as warrant and option derivatives.

On January 1, 2008, the Company adopted FAS No. 157, "Fair Value Measurements" ("FAS 157"). FAS 157 defines fair value, and establishes a three-level valuation hierarchy for disclosures of fair value measurement that enhances disclosure requirements for fair value measures. The carrying amounts reported in the consolidated balance sheets for receivables and current liabilities each qualify as financial instruments and are a reasonable estimate of their fair values because of the short period of time between the origination of such instruments and their expected realization and their current market rate of interest. The three levels of valuation hierarchy are defined as follows:

- Level 1 inputs to the valuation methodology are quoted prices for identical assets or liabilities in active markets.
- Level 2 inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.
- Level 3 inputs to the valuation methodology are unobservable and significant to the fair value measurement.

FAS 133, "Accounting for Derivative Instruments and Hedging Activities" requires bifurcation of embedded derivative instruments and measurement of fair value for accounting purposes. In addition, FAS 155, "Accounting for Certain Hybrid Financial Instruments" requires measurement of fair values of hybrid financial instruments for accounting purposes. The Company applied the accounting prescribed in FAS 133 to account for its 2005 Convertible Debenture as described in Note 11. For practicality in the valuation of the debentures and for ease of presentation, the Company applied the accounting prescribed in FAS 155 to account for the 2006, 2007, February 2008, and April 2008 Convertible Debentures as described below in Notes 7, 8, 9, and 10.

In determining the appropriate fair value of the debentures, the Company used Level 2 inputs for its valuation methodology. For the periods from January 1, 2007 through September 30, 2008, the Company applied the Black-Scholes models, Binomial Option Pricing models, Standard Put Option Binomial models and the net present value of certain penalty amounts to value the debentures and their embedded derivatives. At December 31, 2008, to achieve greater cost efficiencies, the Company changed its application of the Income Approach as defined under paragraph 18 of FAS 157, by applying the Black-Scholes option pricing model in valuing all debentures and their embedded derivatives. This change did not materially impact the results of the Company's valuations of its debentures and embedded derivatives. The impact of the change in the application of the Income Approach was approximately 1.4% of the fair value of the Company's debentures and their embedded derivatives. FAS 157, paragraph 20 states that the disclosure provisions of Statement of Financial Accounting Standards No. 154 Accounting Changes and Error Corrections ("FAS 154") for a change in accounting estimate are not required for revisions resulting from a change in a valuation technique or its application.

Derivative liabilities are adjusted to reflect fair value at each period end, with any increase or decrease in the fair value being recorded in results of operations as Adjustments to Fair Value of Derivatives. The effects of interactions between embedded derivatives are calculated and accounted for in arriving at the overall fair value of the financial instruments. In addition, the fair values of freestanding derivative instruments such as warrant and option derivatives are valued using the Black-Scholes model.

At December 31, 2008, the Company identified the following assets and liabilities that are required to be presented on the balance sheet at fair value:

		Fair Value Measurements at			
	Fair Value	December 31, 2008			
	As of	Using Fair Value Hierarchy			
Derivative Liabilities	December 31, 2008	Level 1	Level 2	Level 3	
Conversion feature - 2005 debenture	4,075	-	4,075	-	
2006 Convertible debenture and embeded derivatives	1,993,354	-	1,993,354	-	
2007 Convertible debenture and embedded					
derivatives	7,706,344	-	7,706,344	-	
February 2008 Convertible debentures and embedded					
derivatives	1,757,470	-	1,757,470	-	
April 2008 Convertible debenture and embedded					
derivatives	4,066,505	-	4,066,505	-	
Warrant and option derivatives	2,655,849	-	2,655,849	-	
	18,183,597	-	18,183,597	-	

For the year ended December 31, 2008 and 2007, the Company recognized a gain of \$13,082,247 and \$32,835,057, respectively, for the changes in the valuation of the aforementioned liabilities.

The Company did not identify any other non-recurring assets and liabilities that are required to be presented in the consolidated balance sheets at fair value in accordance with FAS 157.

In February 2007, the FASB issued FAS No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities" ("FAS 159"). FAS 159 permits entities to choose to measure many financial assets and financial liabilities at fair value. Unrealized gains and losses on items for which the fair value option has been elected are reported in earnings. FAS 159 is effective as of the beginning of an entity's first fiscal year that begins after November 15, 2007. The Company adopted FAS 159 on January 1, 2008. The Company chose not to elect the option to measure the fair value of eligible financial assets and liabilities.

Revenue Recognition — The Company's revenues are generated from license and research agreements with collaborators. Licensing revenue is recognized on a straight-line basis over the shorter of the life of the license or the estimated economic life of the patents related to the license. License fee revenue begins to be recognized in the first full month following the effective date of the license agreement. Deferred revenue represents the portion of the license and other payments received that has not been earned. Costs associated with the license revenue are deferred and recognized over the same term as the revenue. Reimbursements of research expense pursuant to grants are recorded in the period during which collection of the reimbursement becomes assured, because the reimbursements are subject to approval.

Research and Development Costs —Research and development costs consist of expenditures for the research and development of patents and technology, which cannot be capitalized. The Company's research and development costs consist mainly of payroll and payroll related expenses, research supplies and research grants. Reimbursements of

research expense pursuant to grants are recorded in the period during which collection of the reimbursement becomes assured, because the reimbursements are subject to approval. Research and development costs are expensed as incurred.

Share-Based Compensation —Effective January 1, 2006, the Company adopted the fair value recognition provisions of FAS 123(R), using the modified-prospective transition method. Under this method, stock-based compensation expense is recognized in the consolidated financial statements for stock options granted, modified or settled after the adoption date. In accordance with FAS 123(R), the unamortized portion of options granted prior to the adoption date is recognized into earnings after adoption. Results for prior periods have not been restated, as provided for under the modified-prospective method.

Under FAS 123(R), stock-based compensation expense recognized is based on the value of the portion of share-based payment awards that are ultimately expected to vest during the period. Based on this, our stock-based compensation is reduced for estimated forfeitures at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

The fair value of each stock option is estimated on the date of grant using the Black-Scholes option pricing model. Assumptions relative to volatility and anticipated forfeitures are determined at the time of grant with the following weighted average assumptions used in the years ended December 31, 2008 and 2007:

Year Ended December 31,					
	2008	2007			
Expected life in years	4.0	4.0			
Volatility	148%	163%			
Risk free interest rate	2.50%	4.74%			
Expected dividends	None	None			
Expected forfeitures	13%	13%			

The assumptions used in the Black-Scholes models referred to above are based upon the following data: (1) The expected life of the option is estimated by considering the contractual term of the option, the vesting period of the option, the employees' expected exercise behavior and the post-vesting employee turnover rate. (2) The expected stock price volatility of the underlying shares over the expected term of the option is based upon historical share price data. (3) The risk free interest rate is based on published U.S. Treasury Department interest rates for the expected terms of the underlying options. (4) Expected dividends are based on historical dividend data and expected future dividend activity. (5) The expected forfeiture rate is based on historical forfeiture activity and assumptions regarding future forfeitures based on the composition of current grantees.

In accordance with FAS 123(R), the benefits of tax deductions in excess of the compensation cost recognized for options exercised during the period are classified as financing cash inflows rather than operating cash inflows.

Income Taxes — Deferred income taxes are provided using the liability method whereby deferred tax assets are recognized for deductible temporary differences and operating loss and tax credit carryforwards, and deferred tax liabilities are recognized for taxable temporary differences. Temporary differences are the differences between the reported amounts of assets and liabilities and their tax bases. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized. Deferred tax assets and liabilities are adjusted for the effects of the changes in tax laws and rates of the date of enactment.

When tax returns are filed, it is highly certain that some positions taken would be sustained upon examination by the taxing authorities, while others are subject to uncertainty about the merits of the position taken or the amount of the position that would be ultimately sustained. The benefit of a tax position is recognized in the financial statements in the period during which, based on all available evidence, management believes it is more likely than not that the

position will be sustained upon examination, including the resolution of appeals or litigation processes, if any. Tax positions taken are not offset or aggregated with other positions. Tax positions that meet the more-likely-than-not recognition threshold are measured as the largest amount of tax benefit that is more than 50 percent likely of being realized upon settlement with the applicable taxing authority. The portion of the benefits associated with tax positions taken that exceeds the amount measured as described above is reflected as a liability for unrecognized tax benefits in the accompanying balance sheet along with any associated interest and penalties that would be payable to the taxing authorities upon examination.

Applicable interest and penalties associated with unrecognized tax benefits are classified as additional income taxes in the statement of income.

Net Loss Per Share— Earnings per share is calculated in accordance with the SFAS No. 128, "Earnings Per Share" ("SFAS 128"). Basic earnings per share is based upon the weighted average number of common shares outstanding. Diluted earnings per share is based on the assumption that all dilutive convertible shares and stock options were converted or exercised. Dilution is computed by applying the treasury stock method. Under this method, options and warrants are assumed to be exercised at the beginning of the period (or at the time of issuance, if later), and as if funds obtained thereby were used to purchase common stock at the average market price during the period.

At December 31, 2008 and 2007, approximately 270,206,000 and 67,000,000 potentially dilutive shares, respectively, were excluded from the shares used to calculate diluted earnings per share as their inclusion would be anti-dilutive.

Concentrations and Other Risks —Currently, the Company's revenues and accounts receivable are concentrated on a small number of customers. The following table shows the Company's concentrations of its revenue for those customers comprising greater than 10% of total revenue.

	2008	2007
Genzyme Transgenics Corporation	17%	20%
START Licensing, Inc.	13%	15%
Exeter Life Sciences, Inc.	16%	19%
Terumo Corporation	25%	N/A
International Stem Cell Corporation	11%	N/A

Other risks include the uncertainty of the regulatory environment and the effect of future regulations on the Company's business activities. As the Company is a biotechnology research and development company, there is also the attendant risk that someone could commence legal proceedings over the Company's discoveries. Acts of God could also adversely affect the Company's business.

#### **Recent Accounting Pronouncements**

In September 2006, the FASB issued FAS 157 "Fair Value Measurements." This Statement defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles (GAAP), and expands disclosures about fair value measurements. This Statement applies under other accounting pronouncements that require or permit fair value measurements, the Board having previously concluded in those accounting pronouncements that fair value is the relevant measurement attribute. Accordingly, this Statement does not require any new fair value measurements. However, for some entities, the application of this Statement will change current practice. This Statement is effective for financial statements issued for fiscal years beginning after November 15, 2007, and interim periods within those fiscal years. Earlier application is encouraged, provided that the reporting entity has not yet issued financial statements for that fiscal year, including financial statements for an interim period within that fiscal year. The Company has adopted FAS 157 beginning January 1, 2008 and does not believe the adoption had a material impact on our financial position, results of operations or cash flows.

In February 2007, the FASB issued FAS No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities". This Statement permits entities to choose to measure many financial assets and financial liabilities at fair value. Unrealized gains and losses on items for which the fair value option has been elected are reported in earnings. FAS No. 159 is effective as of the beginning of an entity's first fiscal year that begins after November 15, 2007. The Company adopted FAS No. 159 on January 1, 2008. The Company chose not to elect the option to measure the fair value of eligible financial assets and liabilities.

In June 2007, the FASB issued FASB Staff Position No. EITF 07-3, "Accounting for Nonrefundable Advance Payments for Goods or Services Received for use in Future Research and Development Activities" ("FSP EITF 07-3"), which addresses whether nonrefundable advance payments for goods or services that used or rendered for research and development activities should be expensed when the advance payment is made or when the research and development activity has been performed. The implementation of EITF 07-3 did not have an impact on the Company's consolidated financial statements.

In December 2007, the FASB issued SFAS No. 141(R), "Business Combinations" ("SFAS 141R"), which replaced SFAS 141. SFAS 141R retains the purchase method of accounting for acquisitions, but requires a number of changes, including changes in the way assets and liabilities are recognized in the purchase accounting as well as requiring the expensing of acquisition-related costs as incurred. Furthermore, SFAS 141R provides guidance for recognizing and measuring the goodwill acquired in the business combination and determines what information to disclose to enable users of the financial statements to evaluate the nature and financial effects of the business combination. SFAS 141R is effective for fiscal years beginning on or after December 15, 2008. Earlier adoption is prohibited. The Company believes adopting FAS No. 141R will significantly impact its financial statements for any business combination completed after December 31, 2008.

In December 2007, the FASB issued SFAS No. 160, "Noncontrolling Interests in Consolidated Financial Statements — An Amendment of ARB No. 51" ("SFAS 160"). SFAS 160 amends ARB 51 to establish accounting and reporting standards for the noncontrolling interest in a subsidiary and for the deconsolidation of a subsidiary. It is intended to eliminate the diversity in practice regarding the accounting for transactions between equity and noncontrolling interests by requiring that they be treated as equity transactions. Further, it requires consolidated net income to be reported at amounts that include the amounts attributable to both the parent and the noncontrolling interest. SFAS 160 also establishes a single method of accounting for changes in a parent's ownership interest in a subsidiary that do not result in deconsolidation, requires that a parent recognize a gain or loss in net income when a subsidiary is deconsolidated, requires expanded disclosures in the consolidated financial statements that clearly identify and distinguish between the interests of the parent's owners and the interests of the noncontrolling owners of a subsidiary, among others. SFAS 160 is effective for fiscal years beginning on or after December 15, 2008, with early adoption permitted, and it is to be applied prospectively. SFAS 160 is to be applied prospectively as of the beginning of the fiscal year in which it is initially applied, except for the presentation and disclosure requirements, which must be applied retrospectively for all periods presented. The adoption of SFAS 160 will not have an impact on the Company's consolidated financial statements.

In February 2008, the FASB issued FASB Staff Position No. 157-1 ("FSP 157-1"), "Application of FASB Statement No. 157 to FASB Statement No. 13 and Other Accounting Pronouncements That Address Fair Value Measurements for Purposes of Lease Classification or Measurement under Statement 13." FSP 157-1 is effective upon initial adoption of SFAS 157, and indicates that it does not apply under SFAS 13, "Accounting for Leases" and other accounting pronouncements that address fair value measurements for purposes of lease classification or measurement under SFAS 13. This scope exception does not apply to assets acquired and liabilities assumed in a business combination that are required to be measured at fair value under SFAS 141 or SFAS 141R, regardless of whether those assets and liabilities are related to leases. The adoption of FSP 157-1 did not have an impact on the Company's consolidated financial statements.

Also in February 2008, the FASB issued FASB Staff Position No. 157-2 ("FSP 157-2"), "Effective Date of FASB Statement No. 157." With the issuance of FSP 157-2, the FASB agreed to: (a) defer the effective date in SFAS No. 157 for one year for certain nonfinancial assets and nonfinancial liabilities, except those that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually), and (b) remove certain leasing transactions from the scope of SFAS 157. The deferral is intended to provide the FASB time to consider the effect of certain implementation issues that have arisen from the application of SFAS 157 to these assets and liabilities.

In March 2008, the FASB issued SFAS No. 161, "Disclosures about Derivative Instruments and Hedging Activities" ("SFAS 161"). SFAS 161 is intended to improve financial reporting of derivative instruments and hedging activities by requiring enhanced disclosures to enable financial statement users to better understand the effects of derivatives and hedging on an entity's financial position, financial performance and cash flows. The provisions of SFAS 161 are effective for interim periods and fiscal years beginning after November 15, 2008, with early adoption encouraged. The Company does not anticipate that the adoption of SFAS 161 will have a material impact on its consolidated results of operations or consolidated financial position.

In April 2008, the FASB issued FASB Staff Position No. 142-3 "Determination of the useful life of Intangible Assets" ("FSP 142-3"), which amends the factors a company should consider when developing renewal assumptions used to determine the useful life of an intangible asset under SFAS142. This Issue is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. SFAS 142 requires companies to consider whether renewal can be completed without substantial cost or material modification of the existing terms and conditions associated with the asset. FSP 142-3 replaces the previous useful life criteria with a new requirement—that an entity consider its own historical experience in renewing similar arrangements. If historical experience does not exist then the Company would consider market participant assumptions regarding renewal including 1) highest and best use of the asset by a market participant, and 2) adjustments for other entity-specific factors included in SFAS 142. The Company does not anticipate that the adoption of FSP 142-3 will have a material impact on its consolidated results of operations or consolidated financial position.

In May 2008, the FASB issued SFAS No. 162, "The Hierarchy of Generally Accepted Accounting Principles" ("SFAS 162"). SFAS 162 is intended to improve financial reporting by identifying a consistent framework, or hierarchy, for selecting accounting principles to be used in preparing financial statements that are presented in conformity with GAAP for nongovernmental entities. SFAS 162 is effective 60 days following the SEC's approval of the Public Company Accounting Oversight Board ("PCAOB") amendments to AU Section 411, "The Meaning of Present Fairly in Conformity with Generally Accepted Accounting Principles." The Company does not expect the adoption of SFAS 162 will have a material impact on its consolidated results of operations or consolidated financial position.

On May 9, 2008, the FASB issued FASB Staff Position No. APB 14-1 ("FSP APB 14-1"), "Accounting for Convertible Debt Instruments That May Be Settled in Cash upon Conversion (Including Partial Cash Settlement)." FSP APB 14-1 clarifies that convertible debt instruments that may be settled in cash upon conversion (including partial cash settlement) are not addressed by paragraph 12 of APB Opinion No. 14, "Accounting for Convertible Debt and Debt Issued with Stock Purchase Warrants." Additionally, FSP APB 14-1 specifies that issuers of such instruments should separately account for the liability and equity components in a manner that will reflect the entity's nonconvertible debt borrowing rate when interest cost is recognized in subsequent periods. FSP APB14-1 is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. The Company is currently evaluating the impact that FSP APB 14-1 will have on its consolidated results of operations or consolidated financial position.

On June 16, 2008, the FASB issued FSP No. EITF 03-6-1 ("FSP EITF 03-6-1"), "Determining Whether Instruments Granted in Share-Based Payment Transactions Are Participating Securities," to address the question of whether instruments granted in share-based payment transactions are participating securities prior to vesting. FSP EITF 03-6-1 indicates that unvested share-based payment awards that contain rights to dividend payments should be included in earnings per share calculations. The guidance will be effective for fiscal years beginning after December 15, 2008. The Company is currently evaluating the requirements of FSP EITF 03-6-1 and the impact that its adoption will have on the consolidated results of operations or consolidated financial position.

In June 2008, the FASB issued Emerging Issues Task Force Issue 07-5 ("EITF 07-5"), "Determining whether an Instrument (or Embedded Feature) is indexed to an Entity's Own Stock." EITF 07-5 is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. Early application is not permitted. Paragraph 11(a) of SFAS No. 133 "Accounting for Derivatives and Hedging Activities," specifies that a contract that would otherwise meet the definition of a derivative but is both (a) indexed to the Company's own stock and (b) classified in stockholders' equity in the statement of financial position would not be considered a derivative financial instrument. EITF 07-5 provides a new two-step model to be applied in determining whether a financial instrument or an embedded feature is indexed to an issuer's own stock and thus able to qualify for the SFAS 133 paragraph 11(a) scope exception. This standard triggers liability accounting on all options and warrants exercisable at strike prices denominated in any currency other than the functional currency of the operating entity. The Company does not expect the adoption of EITF 07-5 will have an impact on its consolidated results of operations or consolidated financial position.

In June 2008, FASB issued EITF 08-4, "Transition Guidance for Conforming Changes to Issue No. 98-5." The objective of EITF 08-4 is to provide transition guidance for conforming changes made to EITF 98-5, "Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustable Conversion Ratios," that result from EITF 00-27 "Application of Issue No. 98-5 to Certain Convertible Instruments," and SFAS 150, "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity." EITF 08-4 is effective for financial statements issued for fiscal years ending after December 15, 2008. Early application is permitted. The Company is currently evaluating the impact of adoption of EITF 08-4 on the accounting for the convertible notes and related warrants transactions.

On October 10, 2008, the FASB issued FSP 157-3, "Determining the Fair Value of a Financial Asset When the Market for That Asset Is Not Active," which clarifies the application of SFAS 157 in a market that is not active and provides an example to illustrate key considerations in determining the fair value of a financial asset when the market for that financial asset is not active. FSP 157-3 became effective on October 10, 2008, and its adoption did not have a material impact on the Company's consolidated results of operations or consolidated financial position.

In January 2009, the FASB issued FSP EITF 99-20-1, "Amendments to the Impairment Guidance of EITF Issue No. 99-20, and EITF Issue No. 99-20, Recognition of Interest Income and Impairment on Purchased and Retained Beneficial Interests in Securitized Financial Assets" ("FSP EITF 99-20-1"). FSP EITF 99-20-1 changes the impairment model included within EITF 99-20 to be more consistent with the impairment models of FAS No. 115. FSP EITF 99-20-1 achieves this by amending the impairment model in EITF 99-20 to remove its exclusive reliance on "market participant" estimates of future cash flows used in determining fair value. Changing the cash flows used to analyze other-than-temporary impairment from the "market participant" view to a holder's estimate of whether there has been a "probable" adverse change in estimated cash flows allows companies to apply reasonable judgment in assessing whether an other-than-temporary impairment has occurred. The adoption of FSP EITF 99-20-1 will not have a material impact on the Company's consolidated financial statements.

In April 2009, the FASB issued FSP FAS 157-4, "Determining Fair Value When the Volume and Level of Activity for the Asset or Liability Have Significantly Decreased and Identifying Transactions That Are Not Orderly" ("FSP FAS 157-4"). FSP FAS 157-4 provides additional guidance for estimating fair value measurements in accordance with FASB Statement No. 157 when there is not an active market or where the price inputs being used represent distressed sales. FSP FAS 157-4 provides additional guidance on the major categories for which equity and debt securities disclosures are to be presented and amends the disclosure requirements of FASB Statement No. 157 to require disclosure in interim and annual periods of the inputs and valuation technique(s) used to measure fair value and a discussion of changes in valuation techniques and related inputs, if any, during the period. FSP FAS 157-4 shall be applied prospectively and is effective for interim and annual reporting periods ending after June 15, 2009, with early adoption permitted for periods ending after March 15, 2009. An entity early adopting this FSP must also early adopt

FSP No. FAS 115-2 and FAS 124-2, Recognition and Presentation of Other-Than-Temporary Impairment ("FSP FAS 115-2 and FAS 124-2"). The Company is in the process of evaluating the impact, if any, of applying this FSP on its financial position, results of operations and cash flows.

In April 2009, the FASB issued FSP FAS 115-2 and FAS 124-2. This FSP amends SFAS 115, "Accounting for Certain Investments in Debt and Equity Securities," SFAS 124, "Accounting for Certain Investments Held by Not-for-Profit Organizations," and EITF Issue No. 99-20, "Recognition of Interest Income and Impairment on Purchased Beneficial Interests and Beneficial Interests That Continue to Be Held by a Transferor in Securitized Financial Assets," to make the other-than-temporary impairments guidance more operational and to improve the presentation of other-than-temporary impairments in the financial statements. This FSP will replace the existing requirement that the entity's management assert it has both the intent and ability to hold an impaired debt security until recovery with a requirement that management assert it does not have the intent to sell the security, and it is more likely than not it will not have to sell the security before recovery of its cost basis. This FSP provides increased disclosure about the credit and noncredit components of impaired debt securities that are not expected to be sold and also requires increased and more frequent disclosures regarding expected cash flows, credit losses, and an aging of securities with unrealized losses. Although this FSP does not result in a change in the carrying amount of debt securities, it does require that the portion of an other-than-temporary impairment not related to a credit loss for a held-to-maturity security be recognized in a new category of other comprehensive income and be amortized over the remaining life of the debt security as an increase in the carrying value of the security. This FSP shall be effective for interim and annual periods ending after June 15, 2009, with early adoption permitted for periods ending after March 15, 2009. An entity may early adopt this FSP only if it also elects to early adopt FSP FAS 157-4. Also, if an entity elects to early adopt either FSP FAS 157-4 or FSP FAS 107-1 and APB 28-1, the entity also is required to early adopt this FSP. The Company is currently evaluating this new FSP but does not believe that it will have a significant impact on the determination or reporting of the financial results.

In April 2009, the FASB issued FSP No. FAS 107-1 and APB 28-1, "Interim Disclosures about Fair Value of Financial Instruments" ("FSP FAS 107-1 and APB 28-1"). FSP FAS 107-1 and APB 28-1 requires companies to disclose in interim financial statements the fair value of financial instruments within the scope of FASB Statement No. 107, Disclosures about Fair Value of Financial Instruments. However, companies are not required to provide in interim periods the disclosures about the concentration of credit risk of all financial instruments that are currently required in annual financial statements. The fair-value information disclosed in the footnotes must be presented together with the related carrying amount, making it clear whether the fair value and carrying amount represent assets or liabilities and how the carrying amount relates to what is reported in the balance sheet. FSP FAS 107-1 and APB 28-1 also requires that companies disclose the method or methods and significant assumptions used to estimate the fair value of financial instruments and a discussion of changes, if any, in the method or methods and significant assumptions during the period. The FSP shall be applied prospectively and is effective for interim and annual periods ending after June 15, 2009, with early adoption permitted for periods ending after March 15, 2009. An entity early adopting FSP FAS 107-1 and APB 28-1 must also early adopt FSP FAS 157-4 as well as FSP FAS 115-2 and FAS 124-2. The Company will adopt the disclosure requirements of this pronouncement for the quarter ended June 30, 2009, in conjunction with the adoption of FSP FAS 157-4, FSP FAS 115-2 and FAS 124-2.

In May 2009, the FASB issued SFAS No. 165, "Subsequent Events" ("SFAS 165"). SFAS 165 sets forth the period after the balance sheet date during which management of a reporting entity should evaluate events or transactions that may occur for potential recognition or disclosure in the financial statements, the circumstances under which an entity should recognize events or transactions occurring after the balance sheet date in its financial statements, and the disclosures that an entity should make about events or transactions that occurred after the balance sheet date. SFAS 165 will be effective for interim or annual period ending after June 15, 2009 and will be applied prospectively. The Company will adopt the requirements of this pronouncement for the quarter ended June 30, 2009. The Company does not anticipate the adoption of SFAS 165 will have an impact on its consolidated results of operations or consolidated financial position.

#### 4. LICENSE REVENUE

5.

On April 30, 2008 the Company received a one time payment of \$300,000 from Terumo International which extended their ability to commence a Phase I Clinical Trial in Japan by one year. All other terms and conditions for the license agreement between Terumo and the Company remain the same. The Company has recorded \$200,000 in license fee revenue for the year ended December 31, 2008 in its accompanying consolidated statements of operations, and the remainder of the license fee has been accrued in deferred revenue in the accompanying consolidated balance sheet at December 31, 2008. The Company is recognizing revenue from this agreement over the one-year extension period.

On May 23, 2008, the Company received \$150,000 from International Stem Cells, Inc. as a continuing annual payment to renew its license fee for use of certain of the Company's technologies. The Company has recorded \$87,500 in license fee revenue for the year ended December 31, 2008 in its accompanying consolidated statements of operations, and the remainder of the license fee has been accrued in deferred revenue in the accompanying consolidated balance sheet at December 31, 2008. The Company is recognizing revenue from this agreement over a one-year period.

On July 10, 2008, the Company granted an exclusive license to Embryome Sciences, Inc., a wholly owned subsidiary of BioTime, Inc., to use its "ACTCellerate" embryonic stem cell technology and a bank of over 140 diverse progenitor cell lines derived using that technology. Under the agreement, the Company received an up-front payment of \$470,000, and is eligible to receive an 8% royalty on sales of products, services, and processes that utilize the licensed technology. However, in connection with the rent judgment discussed in Note 18, in connection with unpaid rents owed with its landlord, the Company has assigned the landlord rights and interest to 62.5% of all royalties on this contract, and 65% of all other consideration payable under this license agreement until such time that the Company has repaid amounts owed to the landlord that total \$475,000. The Company has recorded \$12,288 in license fee revenue for the year ended December 31, 2008 in its accompanying consolidated statements of operations, and the remainder of the license fee has been accrued in deferred revenue in the accompanying consolidated balance sheet at December 31, 2008. The Company is recognizing revenue from this agreement over its 17-year patent useful life.

On December 18, 2008, the Company entered into a license agreement with Transition for certain of the Company's non-core technology. Under the agreement, Transition agreed to acquire a license to the technology for a total of \$3.5 million in cash. As of December 31, 2008, the Company had received \$2,000,000, less wire fees, in cash under this agreement. The Company received the remaining \$1,500,000 in 2009. The Company expects to apply the proceeds towards its retinal epithelium ("RPE") cells program. The Company has not recorded license fee revenue for the year ended December 31, 2008 as the effective date of the agreement was December 18, 2008 and the Company's policy is to begin recognition of revenue in the first full month following the effective date of the license agreement. The license fee has been accrued in deferred revenue in the accompanying consolidated balance sheet at December 31, 2008. The Company is recognizing revenue from this agreement over its 17-year patent useful life.

In connection with the joint venture agreement discussed in Note 6, on December 1, 2008, the Company entered into a license agreement with CHA for the exclusive, worldwide license to the Hemangioblast Program. Under the agreement, CHA agreed to acquire the Company's core technology for \$500,000 in cash. As of December 31, 2008, the Company had received \$250,000. The Company received the remaining \$250,000 in January 2009. Accordingly, the Company has recorded \$250,000 in accounts receivable in its consolidated balance sheets at December 31, 2008. The Company has recorded \$2,450 in license fee revenue for the year ended December 31, 2008 in its accompanying consolidated statements of operations, and the remainder of the license fee has been accrued in deferred revenue at December 31, 2008. The Company is recognizing revenue from this agreement over its 17-year patent useful life.

PROPERTY AND EQUIPMENT

Property and equipment consisted of the following at December 31, 2008 and 2007:

	2008	2007
Machinery & equipment	\$ 1,470,141	\$ 1,552,642
Computer equipment	436,541	424,612
Office furniture	76,201	76,201
Leasehold improvements	127,197	127,197
Capital leases	51,235	238,754
Accumulated depreciation	(1,761,307)	(1,504,902)
Property and equipment, net	\$ 400,008	\$ 914,504

Depreciation expense for the years ended December 31, 2008 and 2007 amounted to \$402,867 and \$386,643, respectively.

#### 6. INVESTMENT IN JOINT VENTURE

On December 1, 2008, the Company and CHA Bio & Diostech Co., Ltd. ("CHA"), a leading Korean-based biotechnology company focused on the development of stem cell technologies, formed an international joint venture. The new company, Stem Cell & Regenerative Medicine International, Inc. ("SCRMI"), will develop human blood cells and other clinical therapies based on the Company's hemangioblast program, one of the Company's core technologies. Under the terms of the agreement, the Company purchased upfront a 33% interest in the joint venture, and will receive another 7% interest upon fulfilling certain obligations under the agreement over a period of 3 years. The Company's contribution includes (a) the uninterrupted use of a portion of its leased facility at the Company's expense, (b) the uninterrupted use of certain equipment in the leased facility, and (c) the release of certain of the Company's research and science personnel to be employed by the joint venture. In return, for a 67% interest, CHA has agreed to contribute \$150,000 cash and to fund all operational costs in order to conduct the hemangioblast program.

The Company has agreed to collaborate with the joint venture in securing grants to further research and development of its technology. Additionally, SCRMI has agreed to pay the Company a fee of \$500,000 for an exclusive, worldwide license to the Hemangioblast Program. The Company has recorded \$2,450 in license fee revenue for the year ended December 31, 2008 in its accompanying consolidated statements of operations, and the remainder of the license fee has been accrued in deferred revenue in the accompanying consolidated balance sheet at December 31, 2008.

Accounting Principles Board Opinion 18 The Equity Method of Accounting for Investments in Common Stock ("APB 18"), paragraph 19a requires that the difference between the cost of an investment and the amount of underlying equity in net assets of an investee should be accounted for as if the investee were a consolidated subsidiary. The Company has calculated the difference between the cost of the investment and the amount of underlying equity in net assets of the joint venture to be \$196,130, based on the Company's initial cost basis in the investment of \$246,130, less its 33.3% of the initial equity in net assets of the joint venture of \$50,000. The Company will amortize the \$196,130 over the term of the shorter of the equipment usage or lease term (through April 2010, or 17 months from December 1, 2008). The amortization will be applied against the value of the Company's investment. Amortization expense for the month of December 2008 was \$11,537.

The following table is a summary of key financial data for the joint venture as of and for the year ended December 31, 2008:

Current assets	\$ 179,400
Noncurrent assets	\$ 468,150
Current liabilities	\$ 76,869
Noncurrent liabilities	\$ 468,150
Net revenue	\$ 2,450
Net loss	\$ (62,791)

#### 7. CONVERTIBLE NOTE PAYABLE—APRIL 2008

On April 4, 2008, the Company entered into a Securities Purchase Agreement with accredited investors for the issuance of an aggregate of \$4,038,880 principal amount of senior secured convertible debentures with an original issue discount of \$820,648 representing approximately 20.32%. The amortizing senior secured convertible debentures issued at the closing of the 2008 financing will be due and payable one (1) year from the closing, and will not bear interest. The cash purchase price excluding refinancing of bridge debt and in-kind payments was \$2,212,432. Refinanced bridge debt consisted of the aggregate \$130,000 in unsecured convertible notes previously issued and sold to PDPI LLC and The Shapiro Family Trust on March 21, 2008. The net outstanding amount of principal plus interest of the Notes was converted into the debt within the April 2008 debenture on a dollar-for-dollar basis. Dr. Shapiro, one of the Company's directors, may be deemed the beneficial owner of the securities owned by The Shapiro Family Trust. The convertible debentures are convertible beginning on the six-month anniversary of the effective date of the note at the option of the holders into 26,925,867 shares of common stock at a fixed conversion price of \$0.15 per share, subject to anti-dilution and other customary adjustments. The Company has classified the note as short term in the accompanying consolidated balance sheet as of December 31, 2008. The debenture contains no restrictions as to the use of the proceeds, and is intended to fund the Company's working capital obligations. As of June 30, 2009, the entire debenture balance remains outstanding.

Under the terms of the agreements, principal amounts owed under the debentures become due and payable commencing six months following closing of the transaction. At that time, and each month thereafter, the Company is required to either repay 1/30 of the outstanding balance owed in common stock at the lesser of the then conversion price or 80% of the weighted average price for common shares for the 10 trading days prior to the amortization payment date. The debenture agreement does not limit the number of shares that the Company could be required to issue.

The note contains a provision that modifies the conversion rate to \$0.15 per common share and the warrant exercise price to \$0.165 per common share, issued to the April 2008 note payable subscribers who are also participants in the 2005, 2006, and 2007 debentures. The Company has considered the impact of Emerging Issue Task Force statements, or EITFs 96 - 19— Debtor's Accounting for a Modification or Exchange of Debt Instruments, 02 - 4—Determining Whether a Debtor's Modification or Exchange of Debt Instruments is Within the Scope of FASB No. 15, and 05 - 7—Accounting for Modifications to Conversion Options Embedded in Debt Instruments and Related Issues on the accounting treatment of the change in conversion price of the 2005, 2006, and 2007 Convertible Debentures described above. EITF 96 - 19 states that a transaction resulting in a significant change in the nature of a debt instrument should be accounted for as an extinguishment of debt. The Company has concluded that the change in conversion price and warrant exercise price does not constitute a significant change in the nature of the debt and that the transaction should not be treated as an extinguishment of that debt.

In connection with this financing, the Company accrued cash fees to a placement agent of \$20,000 and issued warrants to purchase 26,925,867 shares of Common Stock at an exercise price of \$0.165 per share. The term of the warrants is five years and is subject to anti-dilution and other customary adjustments. The initial fair value of the warrants was estimated at \$2,587,521 using the Black-Scholes pricing model. The warrants were again valued at \$709,384 at December 31, 2008 at fair value using the Black-Scholes model, representing a decrease in the fair value of the liability of \$1,878,137 from the debenture's inception date, which was recorded through the results of operations as an adjustment to fair value of derivatives. The Company issued warrants to purchase an aggregate of 4,263,962 shares of common stock of the Company at an exercise price of \$0.165 to T.R. Winston & Company, LLC as consideration for placement agent services provided in connection with the Debenture. The term of the warrants is five years and is subject to anti-dilution and other customary adjustments. The initial fair value of the warrants was estimated at \$412,732 using the Black-Scholes pricing model. The warrants were again valued at \$112,659 at December 31, 2008 at fair value using the Black-Scholes model, representing a decrease in the fair value of the liability of \$300,073 from the debenture's inception date, which was recorded through the results of operations as an adjustment to fair value of derivatives. The assumptions used in the Black-Scholes option pricing model at April 4, 2008 for all warrants issued in connection with this Debenture are as follows: (1) dividend yield of 0%; (2) expected volatility of 145%, (3) risk-free interest rate of 2.63%, and (4) expected life of 5.0 years. The assumptions used in the Black-Scholes option pricing model at December 31, 2008 for all warrants issued in connection with this Debenture are as follows: (1) dividend yield of 0%; (2) expected volatility of 185%, (3) risk-free interest rate of 0.37%, and (4) expected life of 4.3 years. Cash fees accrued in the amount of \$20,000, the initial fair value of the original issue discount in the amount of \$820,649, and the initial fair value of the warrant discount in the amount of \$3,000,253 were capitalized as debt issuance costs (cash paid) and debt discounts (original issue discount and warrant discount), respectively, and have been amortized in full during the year ended December 31, 2008 due to the August 6, 2008 default as discussed below.

Under the terms of the agreement, beginning October 1, 2008, the Company is to amortize the note resulting in complete repayment by the maturity date. The Company may make the amortization payment in either cash or equity. If the payment is made in common stock, the stock will be issued at a price per share equal to the lesser of (i) the then conversion price, and (ii) 80% of the weighted average price for common shares for the 10 trading days prior to the amortization payment date. As of June 30, 2009, no note amortization has occurred and the note is in default as discussed below.

The agreement entered into provides that the Company will pay certain cash amounts as liquidated damages in the event that the Company does not maintain an effective registration statement, or if the Company fails to timely execute stock trading activity. Additionally, penalties will be incurred by the Company in the event of potential default conditions.

As long as any portion of this debenture remains outstanding, unless the holders of at least 67% in principal amount of the then outstanding debentures otherwise give prior written consent, the Company is not permitted to (a) guarantee or borrow any indebtedness, (b) enter into any liens, (c) amend its charter documents in any manner that materially and adversely affects any rights of the holders, (d) acquire more than a de minimis number of shares of its common stock equivalents other than as to conversion shares of warrant shares as permitted or required and repurchases of common stock or common stock equivalents of departing officers and directors of the Company, provided that such purchases do not exceed certain specified amounts, (e) repay any indebtedness, other than the debentures already issued on a pro-rata basis, other than regularly scheduled principle payments as such terms are in effect under this debenture, (f) pay cash dividends or distributions on any equity securities of the Company, (g) enter into any material transaction with any affiliate of the Company, unless such transaction is made on an arm's-length basis, or (h) enter into any agreement with respect to any of the above.

The Company has complied with the provisions of FAS 155 "Accounting for Certain Hybrid Financial Instruments", and recorded the fair value of the convertible debentures and related embedded conversion option. The initial fair value of the debentures and embedded conversion option was valued using a combination of Binomial and Black-Scholes models, resulting in a fair value of \$4,570,649 at April 4, 2008. The convertible debenture is convertible at the option of the holders into a total of 26,925,867 shares of common stock at a conversion price of \$0.15 per share, subject to anti-dilution and other customary adjustments. The excess of \$531,769 of this value over the face value of the note was recorded through the results of operations as charges related to issuance of April 2008 convertible note payable. The fair value of the debentures and embedded conversion option was \$4,066,505 at December 31, 2008, which includes the face value of the note of \$4,038,880, plus the \$27,625 fair value of the embedded conversion option was valued using the Black-Scholes option pricing model. The assumptions used in the Black-Scholes option pricing model at December 31, 2008 are as follows: (1) dividend yield of 0%; (2) expected volatility of 185%, (3) risk-free interest rate of 0.37%, and (4) expected life of 4.3 years. The change in fair value of the embedded conversion option of \$504,144 is recorded through the results of operations as an adjustment to the fair value of derivatives for the year ended December 31, 2008.

The following table summarizes the changes in the fair values of the respective liabilities versus the values at April 4, 2008:

		Fair Value at								
				April 4,	December 31,			Increase		
Face Amount	Net Purchase P	rice		2008		2008		(Decrease)		
\$ 4,038,880	\$ 3,21	8,232	\$	4,570,649	\$	4,066,505	\$	(504,144)		

As of December 31, 2008, the outstanding principal amount for the 2008 Convertible Debentures is \$4,038,880. Interest expense for the year ended December 31, 2008 was \$3,840,902.

On August 6, 2008, the Company issued a moratorium on amortization of all outstanding debentures. Under the terms of the debenture agreements, the moratorium constitutes an event of default and thus the debentures all incur default interest penalties. As a result of the default, the Company has recognized additional penalty interest, and has recognized the remaining balance of its debt discounts associated with this note in interest expense, and classified the entire balance as short term. See Note 12 for the default interest expense recognized during the year ended December 31, 2008.

#### 8. CONVERTIBLE NOTES PAYABLE—FEBRUARY 2008

The Company issued and sold a \$600,000 unsecured convertible note dated as of February 15, 2008 ("Note A") to JMJ Financial, for a net purchase price of \$500,000 (reflecting a 16.66% original issue discount) in a private placement. Note A bears interest at the rate of 12% per annum, and is due by February 15, 2010. At any time after the 180th day following the effective date of Note A, the holder may at its election convert all or part of Note A plus accrued interest into shares of the Company's common stock at the conversion rate of the lesser of: (a) \$0.38 per share, or (b) 80% of the average of the three lowest trade prices in the 20 trading days prior to the conversion. Pursuant to the Use of Proceeds Agreement entered into in connection with the issuance of Note A, the Company is required to use the proceeds from Note A solely for research and development dedicated to adult stem cell research.

Effective February 15, 2008, in exchange for \$1,000,000 in the form of a Secured & Collateralized Promissory Note (the "JMJ Note") issued by JMJ Financial to the Company, the Company issued and sold an unsecured convertible note ("Note B") to JMJ Financial in the aggregate principal amount of \$1,200,000 or so much as may be paid towards the balance of the JMJ Note. Note B bears interest at the rate of 10% per annum, and is due by February 15, 2010. At any time following the effective date of Note B, the holder may at its election convert all or part of Note B plus accrued interest into shares of the Company's common stock at the conversion rate of the lesser of: (a) \$0.38 per share, or (b) 80% of the average of the three lowest trade prices in the 20 trading days prior to the conversion. In connection with the issuance of Note B, the Company entered into a Collateral and Security Agreement dated as of February 15, 2008 with JMJ Financial pursuant to which the Company granted JMJ Financial a security interest in certain of its assets securing the JMJ Note. As of December 31, 2008, the Company had drawn down and received the following amounts under Note B:

- On March 17, 2008 \$60,000 for a net purchase price of \$50,000 (reflecting a 16.66% original issue discount).
- On June 17, 2008 \$60,000 for a net purchase price of \$50,000 (reflecting a 16.66% original issue discount).

As long as any portion of this debenture remains outstanding, unless the holders of at least 67% in principal amount of the then outstanding debentures otherwise give prior written consent, the Company is not permitted to (a) guarantee or borrow any indebtedness, (b) enter into any liens, (c) amend its charter documents in any manner that materially and adversely affects any rights of the holders, (d) acquire more than a de minimis number of shares of its common stock equivalents other than as to conversion shares of warrant shares as permitted or required and repurchases of common stock or common stock equivalents of departing officers and directors of the Company, provided that such purchases do not exceed certain specified amounts, (e) repay any indebtedness, other than the debentures already issued on a pro-rata basis, other than regularly scheduled principle payments as such terms are in effect under this debenture, (f) pay cash dividends or distributions on any equity securities of the Company, (g) enter into any material transaction with any affiliate of the Company, unless such transaction is made on an arm's-length basis, or (h) enter into any agreement with respect to any of the above.

The debenture agreement does not limit the number of shares that the Company could be required to issue. The convertible debenture is convertible at the option of the holders into a total of 45,000,000 shares of common stock at a conversion price of \$0.016 per share, subject to anti-dilution and other customary adjustments. The conversion options included in Note A and Note B represent embedded derivative instruments. Accordingly, the Company has complied with the provisions of FAS 155 "Accounting for Certain Hybrid Financial Instruments". The fair values of Note A and Note B and the related embedded derivatives, valued using a Monte Carlo simulation model, were recorded as of February 15, 2008. The excess of these values over the face values of Note A and Note B was recorded through the results of operations as charges related to the issuance of the February 2008 convertible notes payable. The fair value of the debentures and embedded conversion options was \$1,757,470 at December 31, 2008, which includes the face value of the debentures of \$720,000, plus the \$1,037,470 fair value of the embedded conversion options. The embedded conversion options were valued using the Black-Scholes option pricing model. The assumptions used in the Black-Scholes option pricing model at December 31, 2008 are as follows: (1) dividend yield of 0%; (2) expected volatility of 185%, (3) risk-free interest rate of 0.37%, and (4) expected life of 1.1 years. The change in fair value of the embedded conversion option of \$301,256 is recorded through the results of operations as an adjustment to the fair value of derivatives for the year ended December 31, 2008.

The following table summarizes the changes in the fair values of the respective liabilities versus the values at February 15, 2008, March 17, 2008, and June 17, 2008.

•				Fair Value at							
						February 15, December 31,			]	Increase	
				Net F	Purchase						
		Fa	ce Amount	Price			2008		2008	(I	Decrease)
Note A		\$	600,000	\$	500,000	\$	1,229,466	\$	1,464,558	\$	235,092
Note B, Tranche 1			60,000		50,000		116,107*		146,456		30,349
Note B, Tranche 2			60,000		50,000		110,641**		146,456		35,815
Total		\$	720,000	\$	600,000	\$	1,456,214	\$	1,757,470	\$	301,256
								0.0			
	*		Fair value at March 17, 2008								
	**				Fair va	alue	at June 17, 200	98			

As of December 31, 2008, the outstanding principal amount for the 2008 Convertible Debentures is \$720,000. Interest expense for the year ended December 31, 2008 was \$144,972.

On August 6, 2008, the Company issued a moratorium on amortization of all outstanding debentures. Under the terms of the debenture agreements, the moratorium constitutes an event of default and thus the debentures all incur default interest penalties. As a result of the default, the Company has recognized additional penalty interest, and has recognized the remaining balance of its debt discounts associated with this note in interest expense, and classified the entire balance as short term. See Note 12 for the default interest expense recognized during the year ended December 31, 2008.

#### 9. CONVERTIBLE DEBENTURES—2007

On August 31, 2007, to fund its continuing operations, the Company entered into a Securities Purchase Agreement with accredited investors for the issuance of an aggregate of \$12,550,000 principal amount of convertible debentures with an original issue discount of \$2,550,000 representing approximately 20.3%. In connection with the closing of the sale of the debentures, the Company received gross proceeds of \$10,000,000. The convertible debentures are convertible at the option of the holders into 36,911,765 shares of common stock at a fixed conversion price of \$0.34 per share, subject to anti-dilution and other customary adjustments. In connection with the Securities Purchase Agreement, the Company also issued warrants to purchase an aggregate of 43,240,655 shares of its common stock. The term of the warrants is five years and the exercise price is \$0.38 per share, subject to anti-dilution and other

customary adjustments. The conversion price and warrant exercise price have each been modified for those subscribers who also participated in the April 2008 convertible note. See Note 7. The investors have contractually agreed to restrict their ability to convert the convertible debentures, exercise the warrants and exercise the additional investment right and receive shares of the Company's common stock such that the number of shares of the Company's common stock held by them and their affiliates after such conversion or exercise does not exceed 4.99% of the Company's then issued and outstanding shares of its common stock.

The April 2008 note (see Note 7) contains a provision that modifies the conversion rate to \$0.15 per common share and the warrant exercise price to \$0.165 per common share, issued to the April 2008 debenture subscribers who are also participants in the 2007 debentures. The Company has considered the impact of Emerging Issue Task Force statements, or EITFs 96 - 19— Debtor's Accounting for a Modification or Exchange of Debt Instruments, 02 -4—Determining Whether a Debtor's Modification or Exchange of Debt Instruments is Within the Scope of FASB No. 15, and 05 - 7—Accounting for Modifications to Conversion Options Embedded in Debt Instruments and Related Issues on the accounting treatment of the change in conversion price of the 2007 Convertible Debentures. EITF 96 - 19 states that a transaction resulting in a significant change in the nature of a debt instrument should be accounted for as an extinguishment of debt. The Company has concluded that the change in conversion price and warrant exercise price does not constitute a significant change in the nature of the debt and that the transaction should not be treated as an extinguishment of that debt. The Company initially recorded an additional debt discount in the amount of \$451,389 to income related to repricing of 2006 and 2007 convertible debentures and warrants at April 4, 2008 for the impact of the change in the conversion price. As a result of the change in the exercise price of the warrants, 2,399,264 warrants remained at \$0.38 exercise price and the remaining 34,512,501 warrants were adjusted to the \$0.165 exercise price as a result of participation in the April 2008 debenture. The convertible debentures are convertible at the option of the holders into 1,999,387 and 42,554,652 shares of common stock at a fixed conversion price of \$0..34 per share and \$0.15 per share, respectively, subject to anti-dilution and other customary adjustments. See Note 7.

The agreements entered into provide that the Company will pay certain cash amounts as liquidated damages in the event that the Company does not maintain an effective registration statement, or if the Company fails to timely execute stock trading activity.

Under the terms of the agreements, principal amounts owed under the debentures become due and payable commencing six months following closing of the transaction. At that time, and each month thereafter, the Company is required to either repay 1/30 of the outstanding balance owed in common stock at the lesser of \$0.34 per share or 80% of the prior ten day's average closing stock price, immediately preceding the redemption. The agreements also provide that the Company may force conversion of outstanding amounts owed under the debentures into common stock, if the Company has met certain conditions and milestones, and additionally, has a stock price for 20 consecutive trading days that exceeds 200% of the conversion price. The debenture agreement does not limit the number of shares that the Company could be required to issue.

As long as any portion of this debenture remains outstanding, unless the holders of at least 67% in principal amount of the then outstanding debentures otherwise give prior written consent, the Company is not permitted to (a) guarantee or borrow any indebtedness, (b) enter into any liens, (c) amend its charter documents in any manner that materially and adversely affects any rights of the holders, (d) acquire more than a de minimis number of shares of its common stock equivalents other than as to conversion shares of warrant shares as permitted or required and repurchases of common stock or common stock equivalents of departing officers and directors of the Company, provided that such purchases do not exceed certain specified amounts, (e) pay cash dividends or distributions on any equity securities of the Company, (f) enter into any material transaction with any affiliate of the Company, unless such transaction is made on an arm's-length basis, or (g) enter into any agreement with respect to any of the above.

The agreement included an embedded conversion option, and the Company has complied with the provisions of FAS 155 "Accounting for Certain Hybrid Financial Instruments", and recorded the fair value of the convertible debentures, and the related embedded derivatives, as of August 31, 2007. The fair value of the debentures and embedded conversion option was \$7,706,344 at December 31, 2008, which includes the face value of the debentures of \$6,986,297, plus the \$722,047 fair value of the embedded conversion option. The embedded conversion option was valued using the Black-Scholes option pricing model. The assumptions used in the Black-Scholes option pricing model at December 31, 2008 are as follows: (1) dividend yield of 0%; (2) expected volatility of 185%, (3) risk-free interest rate of 0.76%, and (4) expected life of 1.7 years. The change in fair value of the embedded conversion option of \$1,649,969 is recorded through the results of operations as an adjustment to the fair value of derivatives for the year

ended December 31, 2008.

In connection with this financing, the Company paid cash fees to a placement agent of \$1,001,800 and issued a warrant to purchase 6,328,890 shares of common stock at an exercise price of \$0.38 per share (modified to \$0.165 for holders who are also subscribers of the April 2008 note payable – see Note 7). The initial fair value of the warrant was estimated at \$2,025,000 using the Black-Scholes pricing model. The broker-dealer warrants were again valued at December 31, 2008 at fair value using the Black-Scholes model, resulting in a decrease in the fair value of the liability from December 31, 2007 of approximately \$750,864, which was recorded through the results of operations as an adjustment to fair value of derivatives. The assumptions used in the Black-Scholes model at December 31, 2008 are as follows: (1) dividend yield of 0%; (2) expected volatility of 184%, (3) risk-free interest rate of 1.6%, and (4) expected life of 3.8 years. Cash fees paid, and the initial fair value of the warrant, were capitalized on the date of the note, and have been amortized in full during the year ended December 31, 2008 due to the August 6, 2008 default as discussed below.

The following table summarizes the 2007 Convertible Debentures and discounts outstanding at December 31, 2008 and December 31, 2007:

	De	ecember 31, 2008	D	ecember 31, 2007
2007 convertible debentures at fair value	\$	7,706,344	\$	11,622,078
Original issue discount		-		(6,063,955)
Warrant derivative discount		-		(2,075,581)
Net convertible debentures	\$	7,706,344	\$	3,482,542
Less current portion		(7,706,344)		(1,160,847)
2007 convertible debenture and embedded derivatives - long term	\$	-	\$	2,321,695

As of December 31, 2008 and 2007, the outstanding principal amount for the 2007 Convertible Debentures is \$6,984,297 and \$12,550,000, respectively. Interest expense for the years ended December 31, 2008 and 2007 was \$10,830,351 and \$336,353, respectively.

On August 6, 2008, the Company issued a moratorium on amortization of all outstanding debentures. Under the terms of the debenture agreements, the moratorium constitutes an event of default and thus the debentures all incur default interest penalties. As a result of the default, the Company has recognized additional penalty interest, and has recognized the remaining balance of its debt discounts associated with this note in interest expense, and classified the entire balance as short term. See Note 12 for the default interest expense recognized during the year ended December 31, 2008.

# 10. CONVERTIBLE DEBENTURES—2006

On September 6, 2006, to fund its continuing operations, the Company entered into a Securities Purchase Agreement with accredited investors for the issuance of an aggregate of \$10,981,250 principal amount of convertible debentures with an original issue discount of \$2,231,250 representing approximately 20.3%. In connection with the closing of the sale of the debentures, the Company received gross proceeds of \$8,750,000. The Company may make the amortization payment in either cash or equity. If the payment is made in common stock, the stock will be issued at a price per share equal to the lesser of (i) the then conversion price, and (ii) 70% of the weighted average price for common shares for the 10 trading days prior to the amortization payment date. The debenture agreement does not limit the number of shares that the Company could be required to issue. In connection with the issuance of the debenture, the Company also issued warrants to purchase 19,064,670 shares of common stock at an initial price of \$0.3168 per share (modified to \$0.165 for holders who are also subscribers of the April 2008 note payable – see Note 7) and exercisable for five years. The warrants were valued using the Black-Scholes option pricing model. The

assumptions used in the Black-Scholes option pricing model at December 31, 2008 are as follows: (1) dividend yield of 0%; (2) expected volatility of 185%, (3) risk-free interest rate of 1.00%, and (4) expected life of 2.7 years. The change in fair value of the embedded conversion option of \$2,238,905 is recorded through the results of operations as an adjustment to the fair value of derivatives for the year ended December 31, 2008.

The agreement included an embedded conversion option, and the Company has complied with the provisions of FAS 155 "Accounting for Certain Hybrid Financial Instruments", and recorded the fair value of the convertible debentures, and related embedded derivatives, as of September 6, 2006. The fair value of the debentures and embedded conversion option was \$1,993,354 at December 31, 2008, which includes the face value of the debentures of \$1,941,595, plus the \$51,759 fair value of the embedded conversion option. The embedded conversion option was valued using the Black-Scholes option pricing model. The assumptions used in the Black-Scholes option pricing model at December 31, 2008 are as follows: (1) dividend yield of 0%; (2) expected volatility of 185%, (3) risk-free interest rate of 0.37%, and (4) expected life of 0.7 years. The change in fair value of the embedded conversion option of \$937,712 is recorded through the results of operations as an adjustment to the fair value of derivatives for the year ended December 31, 2008.

As long as any portion of this debenture remains outstanding, unless the holders of at least 67% in principal amount of the then outstanding debentures otherwise give prior written consent, the Company is not permitted to (a) guarantee or borrow any indebtedness, (b) enter into any liens, (c) amend its charter documents in any manner that materially and adversely affects any rights of the holders, (d) acquire more than a de minimis number of shares of its common stock equivalents other than as to conversion shares of warrant shares as permitted or required and repurchases of common stock or common stock equivalents of departing officers and directors of the Company, provided that such purchases do not exceed certain specified amounts, (e) pay cash dividends or distributions on any equity securities of the Company, or (f) enter into any agreement with respect to any of the above.

The April 2008 note (see Note 7) contains a provision that modifies the conversion rate to \$0.15 per common share and the warrant exercise price to \$0.165 per common share, issued to the April 2008 note payable subscribers who are also participants in the 2006 debentures. The Company has considered the impact of Emerging Issue Task Force statements, or EITFs 96 - 19— Debtor's Accounting for a Modification or Exchange of Debt Instruments, 02 -4—Determining Whether a Debtor's Modification or Exchange of Debt Instruments is Within the Scope of FASB No. 15, and 05 - 7—Accounting for Modifications to Conversion Options Embedded in Debt Instruments and Related Issues on the accounting treatment of the change in conversion price of the 2006 Convertible Debentures. EITF 96 - 19 states that a transaction resulting in a significant change in the nature of a debt instrument should be accounted for as an extinguishment of debt. The Company has concluded that the change in conversion price and warrant exercise price does not constitute a significant change in the nature of the debt and that the transaction should not be treated as an extinguishment of that debt. The Company initially recorded an additional debt discount in the amount of \$396.199 to income related to the repricing of the 2006 and 2007 convertible debentures and warrants at August 6, 2008 for the impact of the change in the conversion price. As a result of the change in the exercise price of the warrants, 6,572,626 warrants remained at the \$0.3168 exercise price and the remaining 12,492,044 warrants were adjusted to the \$0.165 exercise price upon participation in the April 2008 debenture. The convertible debentures are convertible at the option of the holders into 3,866,563 and 5,936,924 shares of common stock at a fixed conversion price of \$0.288 per share and \$0.15 per share, respectively, subject to anti-dilution and other customary adjustments. See Note 7.

The following table summarizes the 2006 Convertible Debentures and discounts outstanding at December 31, 2008 and 2007:

	De	ecember 31, 2008	De	ecember 31, 2007
2006 convertible debentures at fair value	\$	1,993,354	\$	7,386,912
Original issue discount		-		(3,777,403)
Warrant derivative discount		-		(562,018)
Net convertible debentures	\$	1,993,354	\$	3,047,491
Less current portion		(1,993,354)		(1,625,327)
2006 convertible debenture and embedded derivatives - long term	\$	_	\$	1,422,164

In connection with this financing, the Company paid cash fees to a broker-dealer of \$525,000 and issued a warrant to purchase 4,575,521 shares of common stock at an exercise price of \$0.3168 per share (modified for holders who are also subscribers of the April 2008 note payable – see Note 7). The broker-dealer warrants were again valued at December 31, 2008 at fair value using the Black-Scholes model, resulting in a decrease in the fair value of the liability of approximately \$517,539 and \$1,901,059 for the years ended December 31, 2008 and 2007, respectively, which was recorded through the results of operations as a debit to Adjustments to Fair Value of Derivatives. The assumptions used in the Black-Scholes model at December 31, 2008 are as follows: (1) dividend yield of 0%; (2) expected volatility of 184%, (3) risk-free interest rate of 0.08%, and (4) expected life of approximately 2.75 years. Cash fees paid, and the initial fair value of the warrant, were capitalized on the date of the note, and have been amortized in full during the year ended December 31, 2008 due to the August 6, 2008 default as discussed below.

As of December 31, 2008, the outstanding principal amount for the 2006 Convertible Debentures is \$1,941,595. Interest expense for the years ended December 31, 2008 and 2007 was \$6,420,695 and \$2,692,931, respectively.

On August 6, 2008, the Company issued a moratorium on amortization of all outstanding debentures. Under the terms of the debenture agreements, the moratorium constitutes an event of default and thus the debentures all incur default interest penalties. As a result of the default, the Company has recognized additional penalty interest, and has recognized the remaining balance of its debt discounts associated with this note in interest expense, and classified the entire balance as short term. See Note 12 for the default interest expense recognized during the year ended December 31, 2008.

#### 11. CONVERTIBLE DEBENTURES—2005

On September 15, 2005, to fund its continuing operations, the Company entered into a Securities Purchase Agreement with accredited investors for the issuance of an aggregate of \$22,276,250 principal amount of convertible debentures with an original issue discount of \$4,526,250 representing approximately 20.3%. In connection with the closing of the sale of the debentures, the Company received gross proceeds of \$17,750,000. The Company may make the amortization payment in either cash or equity, beginning six months from the closing date of this debenture. If the payment is made in common stock, the stock will be issued at a price per share equal to the lesser of (i) the then conversion price, and (ii) 85% of the weighted average price for common shares for the 10 trading days prior to the amortization payment date. The debenture agreement does not limit the number of shares that the Company could be required to issue.

The agreement included a an embedded conversion option that required separate valuation in accordance with the requirements of FAS 133, EITF –00-27 and related accounting literature. The fair value at December 31, 2008 of the derivative for the conversion feature was valued as an American call option using the Black-Scholes option pricing model with the following inputs: (1) closing stock price from \$0.03 (2) exercise price equal to the \$0.15 conversion price (3) volatility based upon the Company's stock trading of 185% (4) risk-free interest rate of 1.00%, and (5) expected life of 1 year.

During years ended December 31, 2008 and 2007, a decrease in the fair value of the embedded derivative amounts of approximately \$195,140 and \$2,872,000, respectively, was recorded through results of operations as adjustment to fair value of derivatives.

In connection with this financing, we paid cash fees to a broker-dealer of \$1,065,000 and issued a warrant to purchase 1,623,718 shares of Common Stock at an adjusted exercise price of \$0.165 per share. The fair value of the warrant as of December 31, 2008 was estimated at approximately \$7,000 using the Black-Scholes option pricing model. The assumptions used in the Black-Scholes model are as follows: (1) dividend yield of 0%; (2) expected volatility of 184%, (3) risk-free interest rate of 0.04, and (4) expected life of 1 year. Cash fees paid, and the initial fair value of the warrant, were capitalized on the date of the note, and have been amortized in full during the year ended December 31, 2008 due to the August 6, 2008 default as discussed below. During the years ended December 31, 2008 and 2007, the Company recorded approximately \$600,278 and \$4,007,113, respectively, as interest expense in its accompanying consolidated statements of operations.

In January 2007, the Company's Board of Directors agreed to reduce the exercise price of the warrants issued in connection with the 2005 debentures to \$0.95 per share and to reduce the conversion price of the debentures to \$0.90 per share. The conversion price and warrant exercise price have each been further modified in April 2008 for those subscribers who also participated in the April 2008 convertible note. See Note 7.

The Company has considered the impact of Emerging Issue Task Force statements, or EITFs 96 - 19— Debtor's Accounting for a Modification or Exchange of Debt Instruments, 02 - 4—Determining Whether a Debtor's Modification or Exchange of Debt Instruments is Within the Scope of FASB No. 15, and 05 - 7—Accounting for Modifications to Conversion Options Embedded in Debt Instruments and Related Issues on the accounting treatment of the change in conversion price of the 2005 Convertible Debentures described in the paragraph above. EITF 96 - 19 states that a transaction resulting in a significant change in the nature of a debt instrument should be accounted for as an extinguishment of debt. The Company has concluded that the change in conversion price and warrant exercise price does not constitute a significant change in the nature of the debt and that the transaction should not be treated as an extinguishment of that debt.

#### **Anti-dilution Impact**

As a result of the 2007 Financing, described more fully in Note 9, the warrants issued in connection with the 2005 Financing were automatically diluted down to \$0.34. The result of this was to impact both the number and price of the original warrants and replacement warrants issued to both the investors and the brokers.

The new number of original warrants issued to investors totaled 2,335,005. The broker-dealer warrants were again valued at December 31, 2008 at fair value using the Black-Scholes model, resulting in a decrease in the fair value of the liability of \$234,392 for the year ended December 31, 2008, which was recorded through the results of operations as a credit to Adjustments to Fair Value of Derivatives. The assumptions used in the Black-Scholes model to value the warrants as of December 31, 2008 were as follows: (1) dividend yield of 0%; (2) expected volatility of 184%, (3) risk-free interest rate of 0.08%, and (4) expected life of 1.5 years.

The new number of replacement warrants issued to investors and brokers totaled 12,689,966. As a result of the change in the exercise price of the warrants, 3,239,810 warrants remained at the \$0.34 exercise price and the remaining 9,450,156 warrants were adjusted to the \$0.165 exercise price upon participation in the April 2008 debenture. The warrants were again valued at December 31, 2008 at fair value using the Black-Scholes model, resulting in a decrease in the fair value of the liability of approximately \$1,402,947 for the year ended December 31, 2008, which was recorded through the results of operations as a credit to Adjustments to Fair Value of Derivatives. The assumptions used in the Black-Scholes model are as follows: (1) dividend yield of 0%; (2) expected volatility of 184%, (3) risk-free interest rate of 0.08%, and (4) expected life of 2.71 years.

The following table summarizes the 2005 Convertible Debentures and embedded derivatives outstanding at December 31, 2008 and 2007:

	De	cember 31, 2008	De	ecember 31, 2007
2005 convertible debenture at face value	\$	81,922	\$	1,677,904
Discounts on debentures				
Original issue discount		-		(152,073)
Conversion feature derivative		-		(193,084)
Warrant derivative		-		(245,825)
Other derivatives		-		(9,266)
Net convertible debentures		81,922		1,077,656
Embedded derivatives		4,075		199,215
2005 convertible debentures and embedded derivatives		85,997		1,276,871
less current portion		(85,997)		(1,276,871)
2005 convertible debenture and embedded derivatives - long term portion	\$	-	\$	-

On August 6, 2008, the Company issued a moratorium on amortization of all outstanding debentures. Under the terms of the debenture agreements, the moratorium constitutes an event of default and thus the debentures all incur default interest penalties. As a result of the default, the Company has recognized additional penalty interest, and has recognized the remaining balance of its debt discounts associated with this note in interest expense, and classified the entire balance as short term. See Note 12 for the default interest expense recognized during the year ended December 31, 2008.

#### 12. ACCRUED DEFAULT INTEREST

On August 6, 2008, the Company issued a moratorium on amortization of all outstanding debentures. As of June 30, 2009, the moratorium remains in effect. Under the terms of the debenture agreements, the moratorium constitutes an event of default and thus the debentures all incur default interest penalties. The debenture agreements require in the event of default that the full principle amount of the debentures, together with other amounts owing in respect thereof, to the date of acceleration shall become, at the Holder's election, immediately due and payable in cash. The aggregate amount payable upon event of default shall be equal to the mandatory default amount. The mandatory default amount equals the sum of (i) the greater of: (A) 120% of the principle amount of the debentures to be repaid plus 100% of the accrued and unpaid interest, or (B) the principle amount of the debentures to be repaid, divided by the conversion price on (x) the date the mandatory default amount came due or (y) the date the mandatory default amount is paid in full, whichever is less, multiplied by the closing price on (x) the date the mandatory default amount is demanded or otherwise due or (y) the date the mandatory default amount is paid in full, whichever is greater, and (ii) all other amounts, costs, expenses and liquidated damages due in respect to the debentures. Commencing 5 days after the occurrence of any event of default that results in the eventual acceleration of the debentures, the interest rate on the debentures shall accrue at the rate of 18% per annum. Further, as a result of the default, the Company has recognized the remaining balance of its debt discounts associated with this note in interest expense, and classified the entire balance in short term. The following table summarizes the accrued default interest expense recognized in the accompanying consolidated statements of operations for the year ended December 31, 2008, as well as the consolidated balance sheet at December 31, 2008:

	Accrued Penalty
	Interest
2005 debenture	\$ 22,121
2006 debenture	524,284
2007 debenture	1,885,951
February 2008 debenture	194,420
April 2008 debenture	1,090,608
	\$ 3,717,384

#### 13. WARRANT DERIVATIVES—OTHER

In January 2008 the Company issued 680,636 warrants to purchase common stock at \$0.39 per share in connection with consulting services provided during the previous quarter. The warrants were initially valued at \$112,492 using the Black-Scholes option pricing model. These warrants are classified as a warrant derivative liability. The warrants were again valued at December 31, 2008 at fair value using the Black-Scholes pricing model resulting in a decrease in the fair value of the liability of \$90,397 for the year ended December 31, 2008, which was recorded through the results of operations as adjustments to fair value of derivatives. The assumptions used in the Black-Scholes model as of December 31, 2008 are as follows: (1) dividend yield of 0%; (2) expected volatility of 184%, (3) risk-free interest rate of 1.55%, and (4) expected life of 9.1 years.

#### 14. WARRANT SUMMARY

#### Warrant Activity

A summary of warrant activity for the year ended December 31, 2008 is presented below:

	Number of	Weighted Aver Average Remains f Exercise Contras Life		Aggregate Intrinsic Value
	Warrants	Price	years)	(000)
Outstanding, December 31, 2007	104,700,522	\$ 0.29	3.55	\$ 495
Granted	31,870,465	0.15		
Exercised	-	-		
Forfeited	(7,173,036)	0.25		
Outstanding, December 31, 2008	129,397,951	\$ 0.26	3.23	-
Vested and expected to vest at December 31, 2008	129,397,951	0.26	3.23	-
-				
Exercisable, December 31, 2008	129,397,951	\$ 0.26	3.23	-

The aggregate intrinsic value in the table above is before applicable income taxes and is calculated based on the difference between the exercise price of the warrants and the quoted price of the Company's common stock as of the reporting date.

A summary of the status of unvested warrants as of December 31, 2008 and changes during the year then ended, is presented below:

	War	rants Outstanding			Warrants Exercisable				
		Weighted	W	eighted		$W\epsilon$	eighted		
		Average	$\mathbf{A}^{\mathbf{A}}$	verage		Av	erage		
Exercise	Number	Remaining	Exercise		Number	Ex	ercise		
Price	of Shares	Life (Years)	Price		Years) I		of Shares	F	Price
\$ 0.17	107,450,081	3.30	\$	0.17	107,450,081	\$	0.17		
0.32	4,575,521	2.68		0.32	4,575,521		0.32		
0.38 - 0.40	9,409,526	4.08		0.38	9,409,526		0.38		
0.85 - 0.96	5,869,831	1.92		0.95	5,869,831		0.95		
2.20	72,917	2.63		2.20	72,917		2.20		
2.48 - 2.54	2,020,075	0.93		2.54	2,020,075		2.54		
	129,397,951				129,397,951				

#### 15. ADJUSTMENT TO FAIR VALUE OF DERIVATIVES

The following table summarizes the components of the adjustment to fair value of derivatives which were recorded as charges to results of operations for the years ended December 31, 2008 and 2007. The table summarizes by category of derivative liability the (increase) decrease in fair value from market changes during the years ended December 31, 2008 and 2007, the impact of additional investments and repricing and exercise of certain warrants.

	December 31,					
		2008		2007		
Embedded Pipe derivatives - 9.05	\$	(195,140)	\$	(795,772)		
Pipe Hybrid instrument – 9.06		(937,712)		(5,808,165)		
Pipe Hybrid- FAS 155 – 8.07		1,649,969		(374,039)		
Pipe Hybrid- February 2008		351,897		-		
Pipe Hybrid- April 2008		(504,144)		-		
Original warrants PIPE 2005, excluding replacement						
warrants		(234,392)		(891,167)		
Replacement Warrants		(1,402,947)		(633,699)		
Warrants – PIPE 2006-investors		(2,238,905)		(7,924,612)		
Warrants – PIPE 2007-investors		(5,262,623)		(6,784,225)		
Warrants – PIPE 2008-investors		(2,178,210)		-		
Other Warrant Derivatives- 2005 and 2006		(1,805,990)		(7,182,045)		
Other Warrants Derivatives - 2007		(324,050)		(1,598,056)		
	\$	(13,082,247)	\$	(31,991,780)		

### STOCKHOLDERS' EQUITY TRANSACTIONS

The Company is authorized to issue two classes of capital stock, to be designated, respectively, Preferred Stock and Common Stock. The total number of shares of Preferred Stock the Company is authorized to issue is 50,000,000 par value \$0.001 per share. The total number of shares of Common Stock the Company is authorized to issue is 500,000,000, par value \$0.001 per share. The Company had no Preferred Stock outstanding as of December 31, 2008 and had 429,448,381 shares of Common Stock outstanding as of December 31, 2008.

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16.

Effective as of April 1, 2008, Jonathan F. Atzen, the Company's Senior Vice President, General Counsel and Secretary, resigned from his positions with the Company and terminated his employment arrangement with the Company. Pursuant to the terms of an agreement between the Company and Mr. Atzen effective April 1, 2008, the Company agreed to (i) pay Mr. Atzen \$48,333.33 in cash as a severance payment, (ii) issue a fully vested option to purchase an aggregate of 400,000 shares of common stock pursuant to the Company's 2005 Stock Incentive Plan, as amended (the "2005 Plan"), (iii) issue an aggregate of 936,692 shares of the common stock pursuant to the 2005 Plan, (iv) provide for the vesting of all outstanding stock options held by Mr. Atzen and (v) provide Mr. Atzen and his family with full healthcare and dental coverage for a period of 6 months as was provided to Mr. Atzen during his employment.

Effective as of March 17, 2008, Ivan Wolkind, the Company's Senior Vice President—Finance, Administration & Chief Accounting Officer, resigned from all positions with the Company and voluntarily terminated his employment arrangement with the Company for personal reasons. On April 2, 2008, the Company entered into a Consulting Agreement with Mr. Wolkind. Pursuant to the Consulting Agreement, Mr. Wolkind agreed for a period of 90 days to provide up to 20 hours per week of financial consulting services to the Company including but not limited to (i) assisting with general accounting and investor diligence, (ii) commenting on the structure of proposed financial transactions, (iii) responding to queries regarding ACT's corporate structure, and (iv) reviewing strategic and financial documents as appropriate. As consideration for the services to be provided, the Company agreed to pay Mr. Wolkind an aggregate of \$45,834 of which was paid on April 2, 2008. As additional consideration for the services to be provided, the Company agreed to issue to Mr. Wolkind 238,719 shares of common stock pursuant to the 2005 Plan. On May 2, 2008, the consulting contract was terminated with no future payments due.

Between September 29, 2008 and January 20, 2009, the Company was ordered by the Circuit Court of the Twelfth Judicial District Court for Sarasosa County, Florida to settle certain past due accounts payable, for previous professional services and other operating expenses incurred, by the issuance of shares of its common stock. In aggregate, as of January 30, 2009, the Company settled \$1,108,673 in accounts payable through the issuance of 260,116,283 shares of its common stock. In 2008, the Company settled \$603,474 in accounts payable through the issuance of 220,735,436 shares of its common stock. The Company recorded a loss on settlement of \$5,436,137 in its accompanying statements of operations for the year ended December 31, 2008, which includes losses on settlement of \$4,695,289 during the fourth quarter ended December 31, 2008. The losses were calculated as the difference between the amount of accounts payable relieved and the value of the shares (based on the closing share price on the settlement date) that were issued to relieve the accounts payable.

#### STOCK-BASED COMPENSATION

#### Stock Plans

17.

On August 12, 2004, ACT's Board of Directors approved the establishment of the 2004 Stock Option Plan (the "2004 Stock Plan"). Stockholder approval was received on December 13, 2004. The total number of common shares available for grant and issuance under the plan may not exceed 2,800,000 shares, subject to adjustment in the event of certain recapitalizations, reorganizations and similar transactions. Common stock purchase options may be exercisable by the payment of cash or by other means as authorized by the Board of Directors or a committee established by the Board of Directors. At December 31, 2008, ACT had granted 2,492,000 common share purchase options under the plan. At December 31, 2008, there were 308,000 options available for grant under this plan.

On December 13, 2004, ACT's Board of Directors and stockholders approved the establishment of the 2004 Stock Option Plan II (the "2004 Stock Plan II"). The total number of common shares available for grant and issuance under the plan may not exceed 1,301,161 shares, subject to adjustment in the event of certain recapitalizations, reorganizations and similar transactions. Common stock purchase options may be exercisable by the payment of cash or by other means as authorized by the Board of Directors or a committee established by the Board of Directors. At December 31,

2008, ACT had granted 1,301,161 common share purchase options under the plan. At December 31, 2008, there were no options available for grant under this plan.

On January 31, 2005, the Company's Board of Directors approved the establishment of the 2005 Stock Incentive Plan (the "2005 Plan") for its employees, subject to approval of our shareholders. The total number of common shares available for grant and issuance under the plan may not exceed 9 million shares, plus an annual increase on the first day of each of the Company's fiscal years beginning in 2006 equal to 5% of the number of shares of our common stock outstanding on the last day of the immediately preceding fiscal year, subject to adjustment in the event of certain recapitalizations, reorganizations and similar transactions. On January 24, 2008, the Company's shareholders approved an increase of 25,000,000 shares to the 2005 Plan. Common stock purchase options may be exercisable by the payment of cash or by other means as authorized by the Board of Directors or a committee established by the Board of Directors. At December 31, 2008, we had granted 11,875,734 (net of forfeitures) common stock purchase options and 1,497,263 shares of common stock under the plan. At December 31, 2008, there were 15,722,589 options available for grant under this plan.

### Stock Option Activity

A summary of option activity for the years ended December 31, 2008 and 2007 is presented below:

	Number of Options			In	gregate trinsic Value ()
Outstanding, January 1, 2007	12,874,163	\$ 0.71	8.20	\$	1,771
Granted	1,300,000	0.75			
Exercised	(340,000)	0.05			
Forfeited	(2,213,192)	0.83			
Outstanding, December 31, 2007	11,620,971	\$ 0.78	7.16	\$	255
Granted	11,875,734	0.21			
Exercised	(1,200,000)	0.05			
Forfeited	(8,169,015)	0.53			
Outstanding, December 31, 2008	14,127,690	\$ 0.51	7.71	\$	-
Vested and expected to vest at December 31, 2008	13,359,485	0.52	7.64		-
Exercisable, December 31, 2008	8,218,418	\$ 0.70	6.75	\$	-

The aggregate intrinsic value in the table above is before applicable income taxes and is calculated based on the difference between the exercise price of the options and the quoted price of the Company's common stock as of the reporting date.

A summary of the status of unvested employee stock options as of December 31, 2008 and changes during the period then ended, is presented below:

		Weighted Average Grant Date Fair Value Per Share	
	Shares		
Unvested at January 1, 2008	783,814	\$	0.46
Granted	11,875,734		0.21
Vested	(2,372,518)		0.39
Forfeited	(4,377,758)		0.26
Unvested at December 31, 2008	5,909,272	\$	0.24

As of December 31, 2008, total unrecognized stock-based compensation expense related to nonvested stock options was approximately \$1,136,000, which is expected to be recognized over a weighted average period of approximately 9.06 years.

The following table summarizes information about stock options outstanding and exercisable at December 31, 2008.

		Options Outstanding			Options Ex	ercisable	<b>)</b>
		Weighted	W	eighted		We	eighted
		Average	A	verage		A	verage
Exercise	Number	Remaining	Е	xercise	Number	Ex	ercise
Price	of Shares	Life (Years)		Price	of Shares	I	Price
\$ 0.05	922,000	5.62	\$	0.05	922,000	\$	0.05
0.21	7,440,000	9.11		0.21	1,667,586		0.21
0.25	1,301,161	6.00		0.25	1,301,161		0.25
0.35	65,000	7.53		0.35	39,271		0.35
0.75 - 0.76	20,000	7.82		0.75	10,837		0.75
0.85	3,197,112	6.09		0.85	3,173,779		0.85
1.35	235,000	7.31		1.35	205,782		1.35
2.04 - 2.11	295,000	6.99		2.07	251,352		2.07
2.20 - 2.48	652,417	6.65		2.34	646,650		2.34
	14,127,690				8,218,418		

# 18. COMMITMENTS AND CONTINGENCIES

The Company entered into a lease for office and laboratory space in Worcester, Massachusetts commencing December 2004 and expiring April 2010, and for office space in Los Angeles, California commencing November 2005 and expiring May 2008. The Company's rent at its Los Angeles, California site was on a month-to-month basis after May 2008. As discussed in Note 21, on March 1, 2009, the Company vacated its site in Los Angeles, California and moved to another site in Los Angeles. The term on this new lease is through February 28, 2010. Monthly base rent is \$2,170. Annual minimum lease payments are as follows:

Year 1	\$ 265,677
Year 2	89,910
Total	\$ 355,587

Rent expense recorded in the financial statements for the year ended December 31, 2008 and 2007 was \$2,183,126 and \$1,485,218, respectively.

We have entered into employment contracts with certain executives and research personnel. The contracts provide for salaries, bonuses and stock option grants, along with other employee benefits. The employment contracts generally have no set term and can be terminated by either party. There is a provision for payments of three months to one year of annual salary as severance if we terminate a contract without cause, along with the acceleration of certain unvested stock option grants.

Effective as of April 1, 2008, Jonathan F. Atzen, the Company's Senior Vice President, General Counsel and Secretary, resigned from his positions with the Company and terminated his employment arrangement with the Company. Mr. Atzen had no disagreements with the Company, its Board of Directors or its management in any matter relating to the Company's operations, policies or practices.

Effective as of March 17, 2008, Ivan Wolkind, the Company's Senior Vice President—Finance, Administration & Chief Accounting Officer, resigned from all positions with the Company and voluntarily terminated his employment arrangement with the Company for personal reasons. Mr. Wolkind had no disagreements with the Company, its Board of Directors or its management in any matter relating to the Company's operations, policies or practices.

On May 26, 2008, Alan G. Walton, Ph., D.Sc. announced his resignation from the Board of Directors of the Company, effective immediately. Dr. Walton had no disagreements with the Company, its Board of Directors or its management in any matter relating to the Company's operations, policies or practices.

On May 31, 2008, the Company settled a dispute as a subtenant to its Alameda, California office for nonpayment of rent to its sublandlord. The sublease expired on May 31, 2008. As of that date, \$445,000 of base rent, additional rent, and equipment payments, plus late fees and costs due under the sublease for a grand total of approximately \$475,000 remained unpaid during the period from January 1, 2008 through May 31, 2008. On the date of the lease expiration, the Company vacated the premises but failed to remove the equipment that belonged to the Company. Consequently, the Company has agreed to assign all rights to the equipment to the sublandlord in partial settlement of amounts owed. Further, the Company has agreed to assign the sublandlord 62.5% of the Company's right, title, and interest in all royalties and 65% of subtenant's right, title, and interest in all other consideration payable to the Company under a license agreement with Embryome Sciences, Inc., dated July 10, 2008, until such time as the sublandlord has received royalty and other payments equal to \$475,000, including the value of the equipment assigned to the sublandlord. Accordingly, the Company has recorded accrued rents relating to this matter in the amount of \$389,400, which is the \$475,000 settlement amount net of the withheld deposit of \$27,000 and net of abandoned fixed assets of \$58,600, in the accompanying consolidated balance sheet at December 31, 2008. As of June 30, 2009, the entire balance was unpaid.

On September 19, 2008, the Company was delivered judgment with respect to the landlord of its Charlestown, Massachusetts site over unpaid lease amounts. The Company failed to make its monthly lease payments after December 2007, which constituted an event of default under the lease agreement. Accordingly, the Company settled with the landlord in total of \$1,751,543 for unpaid rent expenses, attorney fees, interest and damages for unpaid rent incurred through September 9, 2008. The Company abandoned its fixed assets at this site upon vacating the space, and recorded a loss on disposal of fixed assets amounting to \$227,543 in its accompanying consolidated statement of operations during the year ended December 31, 2008. The Company accrued the remaining balance for the portion of damages incurred from January 1, 2008 through September 30, 2008 in accrued expenses its accompanying balance sheet at December 31, 2008, net of one payment of approximately \$147,000. As of June 30, 2009, the Company had paid the entire amount under the judgment, plus approximately \$104,000 in interest, and no longer has any obligations with respect to this judgment.

The Company and its subsidiary Mytogen, Inc. are currently defending themselves against a civil action brought in Suffolk Superior Court, No. 09-442-B, by their former landlord at 79/96 Thirteenth Street, Charlestown, Massachusetts, a property vacated by the Company and Mytogen effective May 31, 2008. In that action, Alexandria

Real Estate-79/96 Charlestown Navy Yard ("ARE") is alleging that it has been unable to relet the premises and therefore seeking rent for the vacated premises since September 2008. Alexandria is also seeking certain clean-up and storage expenses. The Company is vigorously defending against the suit, claiming that ARE had breached certain convenants as of when Mytogen vacated, and that had ARE used reasonable diligence in its efforts to secure a new tenant, it would have been more successful. No trial date has been set. At this time, management cannot determine the likelihood of an unfavorable outcome from this lawsuit, and thus no amount has been accrued in its financial statements at December 31, 2008. If the Company does not prevail in these proceedings, losses for unpaid rents and other fees could be within a range between \$3.5 million and \$4.5 million.

Between April 1, 2008 and December 31, 2008, ACT issued 6,619,072 shares of common stock to several Holders of the 2005, 2006, 2007 and 2008 Debentures primarily for two reasons: (a) duplicate pre-redemption shares at the time of true-up and (b) negotiated shares with investors in settlement of various complaints from Debenture holders. The Company's policy is to expense the value of these shares to financing costs in the period the shares were issued or the costs were otherwise incurred. In 2008, the Company recorded \$482,430 as financing costs associated with the issuance of these shares. At this time, the Company cannot determine potential legal ramifications arising from the issuance of these shares, and the Company has concluded that the likelihood of unfavorable ramifications from the issuance of these shares is remote and not estimable.

#### 19. INCOME TAXES

The items accounting for the difference between income taxes computed at the federal statutory rate and the provision for income taxes were as follows:

	2008	2007
Statutory federal income tax rate	(34) %	(34) %
State income taxes, net of federal taxes	(6) %	(6) %
Non-includable items	8%	(19) %
Increase in valuation allowance	32%	59%
Effective income tax rate	-	-

Significant components of deferred tax assets and (liabilities) are as follows:

	2008	2007
Deferred tax assets:		(Restated)
Net operating loss carryforwards	\$ 39,265,458	\$ 25,312,676
Employee non-qualified stock options	1,008,424	797,000
Deferred interest and finance charges	43,000	43,000
Deferred revenue	1,250,210	-
Capitalized R&D costs	441,000	441,000
Valuation allowance	(42,008,092)	(26,593,676)
Net deferred tax asset	_	_

The Company files income tax returns in the U.S. federal jurisdiction, and various state jurisdictions. With few exceptions, the Company is no longer subject to U.S. federal, state and local income tax examinations by tax authorities for years before 2001.

At December 31, 2008, the Company had federal and state net operating loss carry forwards available to offset future taxable income of approximately \$95 million and \$92 million respectively. These carry forwards will begin to expire in the years ending December 31, 2022 and December 31, 2012, respectively. These net operating losses are subject to various limitations on utilization based on ownership changes in the prior years under Internal Revenue Code Section 382. The Company is in the process of analyzing the impact of the ownership changes but management does not believe they will have a material impact on the Company's ability to utilize the net operating losses in the future.

The Company periodically evaluates the likelihood of the realization of deferred tax assets, and adjusts the carrying amount of the deferred tax assets by the valuation allowance to the extent the future realization of the deferred tax assets is not judged to be more likely than not. The Company considers many factors when assessing the likelihood of future realization of its deferred tax assets, including its recent cumulative earnings experience by taxing jurisdiction, expectations of future taxable income or loss, the carryforward periods available to the Company for tax reporting purposes, and other relevant factors.

At December 31, 2008, based on the weight of available evidence, including cumulative losses in recent years and expectations of future taxable income, the Company determined that it was more likely than not that its deferred tax assets would not be realized and have a \$42.0 million valuation allowance associated with its deferred tax assets.

The Company adopted the provisions of FASB Interpretation No. 48, Accounting for Uncertainty in Income Taxes ("FIN 48"), on January 1, 2007. FIN 48 prescribes a recognition threshold that a tax position is required to meet before being recognized in the financial statements and provides guidance on recognition, measurement, classification, interest and penalties, accounting in interim periods, disclosure and transition issues.

As a result of the implementation of FIN 48, the Company reduced its net operating loss carryforward by \$1,550,000. This reduction of the net operating loss carryforward translated into a reduction of the gross deferred tax asset of \$658,500, with a corresponding reduction of the valuation allowance against that deferred tax asset. Due to the offsetting effect of the reduction of the valuation allowance, the adoption of FIN 48 had no impact on the Company's balance sheets or statements of operations.

The following table summarizes the activity related to its unrecognized tax benefits:

	Total
Balance at January 1, 2008	\$ 658,500
Increase related to prior period tax positions	-
Increase related to current year tax positions	-
Expiration of the statuts of limitations for the assessment of taxes	-
Other	-
Balance at December 31, 2008	\$ 658,500

The components of income tax expense are as follows:

	2008	2007
Current federal income tax	\$ -	\$ -
Current state income tax	-	-
Deferred taxes	15,414,416	9,192,476
Valuation allowance	(15,414,416)	(9,192,476)
	\$ -	\$ -

Future changes in the unrecognized tax benefit will have no impact on the effective tax rate due to the existence of the valuation allowance. The Company estimates that the unrecognized tax benefit will not change significantly within the next twelve months. The Company will continue to classify income tax penalties and interest as part of general and administrative expense in its consolidated statements of operations. There were no interest or penalties accrued as of December 31, 2008 or 2007.

The following table summarizes the open tax years for each major jurisdiction:

	Open Tax
Jurisdiction	Years
Federal	2001 - 2006
States	2001 - 2006

For tax years 2006 – 2008, the Company has not filed its state or federal tax returns; thus, the statute of limitations has not yet begun its term. As the Company has significant net operating loss carryforwards, even if certain of the Company's tax positions were disallowed, it is not foreseen that the Company would have to pay any taxes in the near future. Consequently, the Company does not calculate the impact of interest or penalties on amounts that might be disallowed.

#### 20. RELATED PARTY TRANSACTIONS

As discussed in Note 7, Dr. Shapiro, one of the Company's directors, may be deemed the beneficial owner of the securities owned by The Shapiro Family Trust. Refinanced bridge debt consisted of \$70,000 in unsecured convertible notes previously issued and sold to The Shapiro Family Trust on March 21, 2008. The net outstanding amount of principal plus interest of the Notes was converted into the debt within the April 2008 debenture on a dollar-for-dollar basis.

Gary Rabin, a member of the Board of Directors may be deemed the beneficial owner of the securities owned by PDPI, LLC, in which he holds a partnership interest. Refinanced debt consisted of \$60,000 in an unsecured note previously issued and sold to PDPI, LLC, and another \$61,000 assumed by PDPI, LLC, and consisted of amounts owed by a third party which were rolled over into the April 2008 Debenture.

#### 21. SUBSEQUENT EVENTS

As discussed in Note 16, between October 3, 2008 and January 20, 2009, the Company was ordered by the Circuit Court of the Twelfth Judicial District Circuit for Sarasosa County, Florida to settle certain past due accounts payable. The Company settled the accounts payable by the issuance of shares of its common stock, based on a formula that divides the amount due in dollars by the settlement date stock price, and multiplied by a specified factor. In January 2009, the Company settled the remaining \$505,199 in accounts payable through the issuance of 39,380,847 shares of its common stock. The Company has recorded a loss on settlement of litigation in its consolidated statement of operations in the amount of \$4,793,949 in the first quarter 2009.

On December 18, 2008, the Company entered into a license agreement with Transition for certain of its non-core technology. Under the agreement, Transition agreed to acquire a license to the technology for \$3.5 million in cash. During 2008, the Company received approximately \$2 million under this agreement. In January 2009, the Company received the remaining \$1.5 million in cash under this agreement. The Company is recognizing revenue from this agreement over its 17-year patent useful life. The Company expects to apply the proceeds towards its retinal epithelium ("RPE") cells program.

On March 1, 2009, the Company vacated a site in Los Angeles, California and moved to another site in Los Angeles. The lease term is through February 28, 2010. Monthly base rent is \$2,170.

On March 5, 2009, the Company settled a lawsuit originally brought by Alpha Capital on February 11, 2009, who is an investor in the 2006, 2007, and 2008 debentures, and associated with the default on August 6, 2008 on all debentures. In settlement of the lawsuit, the Company agreed to reduce the conversion price on convertible debentures held by Alpha Capital to \$0.02 per share, effective immediately, so long as the Company has a sufficient number of

authorized shares to honor the request for conversion.

On March 11, 2009, the Company entered into a \$5 million credit facility ("Facility") with a life sciences fund. Under the agreement, the proceeds from the Facility must be used exclusively for the Company to file an investigational new drug ("IND") for its RPE program, and will allow the Company to complete both Phase I and Phase II studies in humans. An IND is required to commence clinical trials. Under the terms of the agreement, the Company may draw down funds, as needed for clinical development of the RPE program, from the investor through the issuance of Series A-1 convertible preferred stock. The preferred stock pays dividends, in kind of preferred stock, at an annual rate of 10%, matures in four years from the drawdown date, and is convertible into common stock at \$0.75 per share. As of June 30, 2009, the Company has drawn down \$1,505,000 on this credit facility. For providing investor relations services in connection with this credit facility, the Company issued a consultant 24,900,000 shares of its common stock on February 9, 2009. The Company valued the issuance of these shares at \$4,731,000 based on a closing price of \$0.19 on February 9, 2009 and recorded the value of the shares as deferred financing costs associated with the financing on the date they were issued.

#### CHA Bio & Diostech Co., Ltd.

On March 30, 2009, the Company entered into a second license agreement with CHA under which the Company will license its RPE technology, for the treatment of diseases of the eye, to CHA for development and commercialization exclusively in Korea. The Company is eligible to receive up to a total of \$1.9 million in fees based upon the parties achieving certain milestones, including the Company making an IND submission to the US FDA to commence clinical trials in humans using the technology. The Company received an up-front fee under the license in the amount of \$1,000,000. Under the agreement, CHA will incur all of the costs associated with the RPA clinical trials in Korea.

On May 13, 2009, the Company entered into a third license agreement with CHA under which the Company will license its proprietary "single blastomere technology," which has the potential to generate stable cell lines, including RPE for the treatment of diseases of the eye, for development and commercialization exclusively in Korea. The Company received an upfront license fee of \$300,000.

During our two most recent fiscal years and any subsequent interim period our independent auditor, SingerLewak LLP, who we engaged to audit our financial statements has not resigned (or indicated that it has declined to stand for re-election after the completion of the current audit) or been dismissed.

A representative of SingerLewak LLP will not be at the Special Meeting of Stock Holders.

#### **AVAILABLE INFORMATION**

We are currently subject to the information requirements of the Securities Exchange Act of 1934, as amended, and in accordance therewith file periodic reports, Proxy Statements and other information with the SEC relating to our business, financial statements and other matters. Copies of such reports, Proxy Statements and other information may be copied (at prescribed rates) at the public reference room maintained by the Securities and Exchange Commission at 100 F Street NE, Washington DC 20549. For further information concerning the SEC's public reference room, you may call the SEC at 1-800-SEC-0330. Some of this information may also be accessed on the World Wide Web through the SEC's Internet address at http://www.sec.gov.

Requests for documents relating to the Company should be directed to:

Advanced Cell Technology, Inc. 381 Plantation Street Worcester, MA 01605 Attention: William M. Caldwell, IV

Our board of directors hopes that shareholders will attend the special meeting. Whether or not you plan to attend, you are urged to complete, date and sign the enclosed proxy card and return it in the accompanying envelope. Prompt response will greatly facilitate arrangements for the meeting, and your cooperation is appreciated. Shareholders who attend the meeting may vote their shares personally even though they have sent in their proxy cards.

\* \* \*

BY ORDER OF THE BOARD OF DIRECTORS

William M. Caldwell, IV Chief Executive Officer

Worcester, Massachusetts , 2009

Appendix A

# ADVANCED CELL TECHNOLOGY, INC. 2005 STOCK INCENTIVE PLAN

Amended July , 2009 (Subject to Stockholder Approval, 20
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- 1. Purposes of the Plan. The purposes of this 2005 Stock Incentive Plan are to attract and retain highly qualified personnel for positions of substantial responsibility, to provide additional incentive to Employees, Consultants and Directors and to promote the success of the Company's business. Options granted under the Plan may be Incentive Stock Options or Nonstatutory Stock Options, as determined by the Administrator at the time of grant of an option and subject to the applicable provisions of Section 422 of the Code and the regulations and interpretations promulgated thereunder. Stock Purchase Rights may also be granted under the Plan.
- 2. Definitions. As used herein, the following definitions shall apply:
  - (a) "Administrator" means the Board or its Committee appointed pursuant to Section 4 of the Plan.
- (b) "Affiliate" means an entity other than a Subsidiary (as defined below) which, together with the Company, is under common control of a third person or entity.
- (c) "Applicable Laws" means the legal requirements relating to the administration of stock option and restricted stock purchase plans, including under applicable U.S. state corporate laws, U.S. federal and applicable state securities laws, other U.S. federal and state laws, the Code, any Stock Exchange rules or regulations and the applicable laws, rules and regulations of any other country or jurisdiction where Options or Stock Purchase Rights are granted under the Plan, as such laws, rules, regulations and requirements shall be in place from time to time.
  - (d) "Board" means the Board of Directors of the Company.
- (e) "Cause" for termination of a Participant's Continuous Service Status will exist if the Participant is terminated by the Company for any of the following reasons: a Participant's (i) failure to properly perform his or her job responsibilities, as determined reasonably and in good faith by the Board; (ii) commission of any act of fraud, gross misconduct or dishonesty with respect to the Company; (iii) conviction of, or plea of guilty or "no contest" to, any felony, or a crime involving moral turpitude; (iv) breach of any proprietary information and inventions agreement with the Company; or (v) failure to follow lawful directions of the Board. The determination as to whether a Participant is being terminated for Cause shall be made in good faith by the Company and shall be final and binding on the Participant. The foregoing definition does not in any way limit the Company's ability to terminate a Participant's employment or consulting relationship at any time as provided in Section 5(d) below, and the term "Company" will be interpreted to include any Subsidiary, Parent or Affiliate, as appropriate.
- (f) "Change of Control" means (1) a sale of all or substantially all of the Company's assets, or (2) any merger, consolidation or other business combination transaction of the Company with or into another corporation, entity or person, other than a transaction in which the holders of at least a majority of the shares of voting capital stock of the Company outstanding immediately prior to such transaction continue to hold (either by such shares remaining outstanding or by their being converted into shares of voting capital stock of the surviving entity) a majority of the total voting power represented by the shares of voting capital stock of the Company (or the surviving entity) outstanding immediately after such transaction, or (3) the direct or indirect acquisition (including by way of a tender or exchange offer) by any person, or persons acting as a group, of beneficial ownership or a right to acquire beneficial ownership of shares representing a majority of the voting power of the then outstanding shares of capital stock of the

Company.

- (g) "Code" means the Internal Revenue Code of 1986, as amended.
- (h) "Committee" means one or more committees or subcommittees of the Board appointed by the Board to administer the Plan in accordance with Section 4 below.
  - (i) "Common Stock" means the Common Stock of the Company.
  - (j) "Company" means A.C.T. Holdings, Inc., a Nevada corporation.
- (k) "Consultant" means any person, including an advisor, who is engaged by the Company or any Parent, Subsidiary or Affiliate to render services and is compensated for such services.
- (l) "Continuous Service Status" means the absence of any interruption or termination of service as an Employee or Consultant. Continuous Service Status as an Employee or Consultant shall not be considered interrupted in the case of: (i) sick leave; (ii) military leave; (iii) any other leave of absence approved by the Administrator, provided that such leave is for a period of not more than ninety (90) days, unless reemployment upon the expiration of such leave is guaranteed by contract or statute, or unless provided otherwise pursuant to Company policy adopted from time to time; or (iv) in the case of transfers between locations of the Company or between the Company, its Parents, Subsidiaries, Affiliates or their respective successors. A change in status from an Employee to a Consultant or from a Consultant to an Employee will not constitute an interruption of Continuous Service Status.
- (m) "Corporate Transaction" means a sale of all or substantially all of the Company's assets, or a merger, consolidation or other capital reorganization or business combination transaction of the Company with or into another corporation, entity or person, or the direct or indirect acquisition (including by way of a tender or exchange offer) by any person, or persons acting as a group, of beneficial ownership or a right to acquire beneficial ownership of shares representing a majority of the voting power of the then outstanding shares of capital stock of the Company.
  - (n) "Director" means a member of the Board.
- (o) "Employee" means any person employed by the Company or any Parent, Subsidiary or Affiliate, with the status of employment determined based upon such factors as are deemed appropriate by the Administrator in its discretion, subject to any requirements of the Code or the Applicable Laws. The payment by the Company of a director's fee to a Director shall not be sufficient to constitute "employment" of such Director by the Company.
  - (p) "Exchange Act" means the Securities Exchange Act of 1934, as amended.
- (q) "Fair Market Value" means, as of any date, the fair market value of the Common Stock, as determined by the Administrator in good faith on such basis as it deems appropriate and applied consistently with respect to Participants. Whenever possible, the determination of Fair Market Value shall be based upon the closing price for the Shares on a national securities exchange or interdealer quotation system.
- (r) "Incentive Stock Option" or "ISO" means an Option intended to qualify as an incentive stock option within the meaning of Section 422 of the Code, as designated in the applicable Option Agreement.
- (s) "Listed Security" means any security of the Company that is listed or approved for listing on a national securities exchange or designated or approved for designation as a national market system security on an interdealer quotation system by the National Association of Securities Dealers, Inc.

- (t) "Named Executive" means any individual who, on the last day of the Company's fiscal year, is the chief executive officer of the Company (or is acting in such capacity) or among the four most highly compensated officers of the Company (other than the chief executive officer). Such officer status shall be determined pursuant to the executive compensation disclosure rules under the Exchange Act.
- (u) "Nonstatutory Stock Option" means an Option not intended to qualify as an Incentive Stock Option, as designated in the applicable Option Agreement.
- (v) "Option" means a stock option granted pursuant to the Plan.
- (w) "Option Agreement" means a written document, the form(s) of which shall be approved from time to time by the Administrator, reflecting the terms of an Option granted under the Plan and includes any documents attached to or incorporated into such Option Agreement, including, but not limited to, a notice of stock option grant and a form of exercise notice.
- (x) "Option Exchange Program" means a program approved by the Administrator whereby outstanding Options are exchanged for Options with a lower exercise price or are amended to decrease the exercise price as a result of a decline in the Fair Market Value of the Common Stock.
- (y) "Optioned Stock" means the Common Stock subject to an Option.
- (z) "Optionee" means an Employee, Director or Consultant who receives an Option.
- (aa) "Parent" means a "parent corporation," whether now or hereafter existing, as defined in Section 424(e) of the Code, or any successor provision.
- (bb) "Participant" means any holder of one or more Options or Stock Purchase Rights, or the Shares issuable or issued upon exercise of such awards, under the Plan.
- (cc) "Plan" means this 2005 Stock Incentive Plan.
- (dd) "Reporting Person" means an officer, Director, or greater than ten percent stockholder of the Company within the meaning of Rule 16a-2 under the Exchange Act, who is required to file reports pursuant to Rule 16a-3 under the Exchange Act.
- (ee) "Restricted Stock" means Shares of Common Stock acquired pursuant to a grant of a Stock Purchase Right under Section 11 below.
- (ff) "Restricted Stock Purchase Agreement" means a written document, the form(s) of which shall be approved from time to time by the Administrator, reflecting the terms of a Stock Purchase Right granted under the Plan and includes any documents attached to such agreement.
- (gg) "Rule 16b-3" means Rule 16b-3 promulgated under the Exchange Act, as amended from time to time, or any successor provision.
- (hh) "Share" means a share of the Common Stock, as adjusted in accordance with Section 14 of the Plan.
- (ii) "Stock Exchange" means any stock exchange or consolidated stock price reporting system on which prices for the Common Stock are quoted at any given time.

- (jj) "Stock Purchase Right" means the right to purchase Common Stock pursuant to Section 11 below.
- (kk) "Subsidiary" means a "subsidiary corporation," whether now or hereafter existing, as defined in Section 424(f) of the Code, or any successor provision.
- (ll) "Ten Percent Holder" means a person who owns stock representing more than ten percent (10%) of the voting power of all classes of stock of the Company or any Parent or Subsidiary.

3. Stock Subject to the Plan.
(a) Subject to the provisions of Section 3(b) and Section 15 of the Plan, the maximum aggregate number of Shares under the Plan that may be awarded as Incentive Stock Options or otherwise is
(b) The number of shares of Common Stock available for issuance under the Plan shall automatically increase on the first day of each of the Company's fiscal years beginning in $2008$ equal to $5\%$ of the Shares outstanding on the last day of the immediately preceding fiscal year.
4. Administration of the Plan.
(a) General. The Plan shall be administered by the Board or a Committee, or a combination thereof, as determined by the Board. The Plan may be administered by different administrative bodies with respect to different classes of Participants and, if permitted by the Applicable Laws, the Board may authorize one or more officers to make awards under the Plan.
(b) Committee Composition. If a Committee has been appointed pursuant to this Section 4, such Committee shall continue to serve in its designated capacity until otherwise directed by the Board. From time to time the Board may increase the size of any Committee and appoint additional members thereof, remove members (with or without cause) and appoint new members in substitution therefor, fill vacancies (however caused) and remove all members of a Committee and thereafter directly administer the Plan, all to the extent permitted by the Applicable Laws and, in the case of a Committee administering the Plan in accordance with the requirements of Rule 16b-3 or Section 162(m) of the Code, to the extent permitted or required by such provisions. The Committee shall in all events conform to any requirements of the Applicable Laws.
(c) Powers of the Administrator. Subject to the provisions of the Plan and in the case of a Committee, the specific duties delegated by the Board to such Committee, the Administrator shall have the authority, in its discretion:
(i) to determine the Fair Market Value of the Common Stock, in accordance with Section 2(q) of the Plan, provided that such determination shall be applied consistently with respect to Participants under the Plan;
(ii) to select the Employees, Consultants and Directors to whom Plan awards may from time to time be granted;
(iii) to determine whether and to what extent Plan awards are granted;

(iv) to determine the number of Shares of Common Stock to be covered by each award granted;

- (v) to approve the form(s) of agreement(s) used under the Plan;
- (vi) to determine the terms and conditions, not inconsistent with the terms of the Plan, of any award granted hereunder, which terms and conditions include but are not limited to the exercise or purchase price, the time or times when awards may be exercised (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions, any pro rata adjustment to vesting as a result of a Participant's transitioning from full- to part-time service (or vice versa), and any restriction or limitation regarding any Option, Optioned Stock, Stock Purchase Right or Restricted Stock, based in each case on such factors as the Administrator, in its sole discretion, shall determine;
- (vii)to determine whether and under what circumstances an Option may be settled in cash under Section 10(c) instead of Common Stock;
- (viii) to implement an Option Exchange Program on such terms and conditions as the Administrator in its discretion deems appropriate, provided that no amendment or adjustment to an Option that would materially and adversely affect the rights of any Optionee shall be made without the prior written consent of the Optionee;
- (ix) to adjust the vesting of an Option held by an Employee, Consultant or Director as a result of a change in the terms or conditions under which such person is providing services to the Company;
- (x) to construe and interpret the terms of the Plan and awards granted under the Plan, which constructions, interpretations and decisions shall be final and binding on all Participants; and
- (xi)in order to fulfill the purposes of the Plan and without amending the Plan, to modify grants of Options or Stock Purchase Rights to Participants who are foreign nationals or employed outside of the United States in order to recognize differences in local law, tax policies or customs.

#### 5. Eligibility.

- (a) Recipients of Grants. Nonstatutory Stock Options and Stock Purchase Rights may be granted to Employees, Consultants and Directors. Incentive Stock Options may be granted only to Employees, provided that Employees of Affiliates shall not be eligible to receive Incentive Stock Options.
- (b) Type of Option. Each Option shall be designated in the Option Agreement as either an Incentive Stock Option or a Nonstatutory Stock Option.
- (c) ISO \$100,000 Limitation. Notwithstanding any designation under Section 5(b), to the extent that the aggregate Fair Market Value of Shares with respect to which Options designated as Incentive Stock Options are exercisable for the first time by any Optionee during any calendar year (under all plans of the Company or any Parent or Subsidiary) exceeds \$100,000, such excess Options shall be treated as Nonstatutory Stock Options. For purposes of this Section 5(c), Incentive Stock Options shall be taken into account in the order in which they were granted, and the Fair Market Value of the Shares subject to an Incentive Stock Option shall be determined as of the date of the grant of such Option.
- (d) No Employment Rights. The Plan shall not confer upon any Participant any right with respect to continuation of an employment or consulting relationship with the Company, nor shall it interfere in any way with such Participant's right or the Company's right to terminate the employment or consulting relationship at any time for any reason.

- 6. Term of Plan. The Plan shall become effective upon its adoption by the Board of Directors. It shall continue in effect for a term of ten (10) years unless sooner terminated under Section 17 of the Plan.
- 7. Term of Option. The term of each Option shall be the term stated in the Option Agreement; provided that the term shall be no more than ten years from the date of grant thereof or such shorter term as may be provided in the Option Agreement and provided further that, in the case of an Incentive Stock Option granted to a person who at the time of such grant is a Ten Percent Holder, the term of the Option shall be five years from the date of grant thereof or such shorter term as may be provided in the Option Agreement.
- 8. Limitation on Grants to Employees. Subject to adjustment as provided in Section 15 below, the maximum number of Shares that may be subject to Options and Stock Purchase Rights granted to any one Employee under this Plan for any fiscal year of the Company shall be \_\_\_\_\_ (adjusted for \_\_\_\_\_ reverse stock split effected \_\_\_\_\_), provided that this Section 8 shall apply only after such time, if any, as the Common Stock becomes a Listed Security.
- 9. Option Exercise Price and Consideration.
- (a) Exercise Price. The per Share exercise price for the Shares to be issued pursuant to exercise of an Option shall be such price as is determined by the Administrator and set forth in the Option Agreement, but shall be subject to the following:
  - (i) In the case of an Incentive Stock Option
- (A) granted to an Employee who at the time of grant is a Ten Percent Holder, the per Share exercise price shall be no less than 110% of the Fair Market Value per Share on the date of grant; or
- (B) granted to any other Employee, the per Share exercise price shall be no less than 100% of the Fair Market Value per Share on the date of grant.
  - (ii) In the case of a Nonstatutory Stock Option
- (A) granted on any date on which the Common Stock is not a Listed Security to a person who is at the time of grant a Ten Percent Holder, the per Share exercise price shall be no less than 110% of the Fair Market Value per Share on the date of grant if required by the Applicable Laws and, if not so required, shall be such price as is determined by the Administrator;
- (B) granted on any date on which the Common Stock is not a Listed Security to any other eligible person, the per Share exercise price shall be no less than 100% of the Fair Market Value per Share on the date of grant if required by the Applicable Laws and, if not so required, shall be such price as is determined by the Administrator; or
- (C) granted on any date on which the Common Stock is a Listed Security to any eligible person, the per Share exercise price shall be such price as determined by the Administrator, which shall be no less than 100% of the Fair Market Value on the date of grant, and, if such person is, at the time of grant of such Option, a Named Executive of the Company, the per Share exercise price shall be no less than 100% of the Fair Market Value on the date of grant if such Option is intended to qualify as performance-based compensation under Section 162(m) of the Code.
- (iii) Notwithstanding the foregoing, Options may be granted with a per Share exercise price other than as required above pursuant to a merger or other corporate transaction.

(b) Permissible Consideration. The consideration to be paid for the Shares to be issued upon exercise of an Option, including the method of payment, shall be determined by the Administrator (and, in the case of an Incentive Stock Option, shall be determined at the time of grant) and may consist entirely of (1) cash; (2) check; (3) subject to any requirements of the Applicable Laws (including without limitation Section 153 of the Delaware General Corporation Law), delivery of Optionee's promissory note having such recourse, interest, security and redemption provisions as the Administrator determines to be appropriate after taking into account the potential accounting consequences of permitting an Optionee to deliver a promissory note; (4) cancellation of indebtedness; (5) other Shares that have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which the Option is exercised, provided that in the case of Shares acquired, directly or indirectly, from the Company, such Shares must have been owned by the Optionee for more than six months on the date of surrender (or such other period as may be required to avoid the Company's incurring an adverse accounting charge); (6) if, as of the date of exercise of an Option the Company then is permitting employees to engage in a "same-day sale" cashless brokered exercise program involving one or more brokers, through such a program that complies with the Applicable Laws (including without limitation the requirements of Regulation T and other applicable regulations promulgated by the Federal Reserve Board) and that ensures prompt delivery to the Company of the amount required to pay the exercise price and any applicable withholding taxes; or (7) any combination of the foregoing methods of payment. In making its determination as to the type of consideration to accept, the Administrator shall consider if acceptance of such consideration may be reasonably expected to benefit the Company and the Administrator may, in its sole discretion, refuse to accept a particular form of consideration at the time of any Option exercise.

## 10. Exercise of Option.

- (a) General.
- (i) Exercisability. Any Option granted hereunder shall be exercisable at such times and under such conditions as determined by the Administrator, consistent with the term of the Plan and reflected in the Option Agreement, including vesting requirements and/or performance criteria with respect to the Company and/or the Optionee; provided however that, if required under the Applicable Laws, the Option (or Shares issued upon exercise of the Option) shall comply with the requirements of Section 260.140.41(f) and (k) of the Rules of the California Corporations Commissioner.
- (ii) Leave of Absence. The Administrator shall have the discretion to determine whether and to what extent the vesting of Options shall be tolled during any unpaid leave of absence; provided, however, that in the absence of such determination, vesting of Options shall be tolled during any such unpaid leave (unless otherwise required by the Applicable Laws). In the event of military leave, vesting shall toll during any unpaid portion of such leave, provided that, upon a Participant's returning from military leave (under conditions that would entitle him or her to protection upon such return under the Uniform Services Employment and Reemployment Rights Act), he or she shall be given vesting credit with respect to Options to the same extent as would have applied had the Participant continued to provide services to the Company throughout the leave on the same terms as he or she was providing services immediately prior to such leave.
- (iii) Minimum Exercise Requirements. An Option may not be exercised for a fraction of a Share. The Administrator may require that an Option be exercised as to a minimum number of Shares, provided that such requirement shall not prevent an Optionee from exercising the full number of Shares as to which the Option is then exercisable.

(iv) Procedures for and Results of Exercise. An Option shall be deemed exercised when written notice of such exercise has been given to the Company in accordance with the terms of the Option by the person entitled to exercise the Option and the Company has received full payment for the Shares with respect to which the Option is exercised. Full payment may, as authorized by the Administrator, consist of any consideration and method of payment allowable under Section 9(b) of the Plan, provided that the Administrator may, in its sole discretion, refuse to accept any form of consideration at the time of any Option exercise.

Exercise of an Option in any manner shall result in a decrease in the number of Shares that thereafter may be available, both for purposes of the Plan and for sale under the Option, by the number of Shares as to which the Option is exercised.

- (v) Rights as Stockholder. Until the issuance of the Shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder shall exist with respect to the Optioned Stock, notwithstanding the exercise of the Option. No adjustment will be made for a dividend or other right for which the record date is prior to the date the stock certificate is issued, except as provided in Section 15 of the Plan.
- (b) Termination of Employment or Consulting Relationship. Except as otherwise set forth in this Section 10(b), the Administrator shall establish and set forth in the applicable Option Agreement the terms and conditions upon which an Option shall remain exercisable, if at all, following termination of an Optionee's Continuous Service Status, which provisions may be waived or modified by the Administrator at any time. Unless the Administrator otherwise provides in the Option Agreement, to the extent that the Optionee is not vested in Optioned Stock at the date of termination of his or her Continuous Service Status, or if the Optionee (or other person entitled to exercise the Option) does not exercise the Option to the extent so entitled within the time specified in the Option Agreement or below (as applicable), the Option shall terminate and the Optioned Stock underlying the unexercised portion of the Option shall revert to the Plan. In no event may any Option be exercised after the expiration of the Option term as set forth in the Option Agreement (and subject to Section 7).

The following provisions (1) shall apply to the extent an Option Agreement does not specify the terms and conditions upon which an Option shall terminate upon termination of an Optionee's Continuous Service Status, and (2) establish the minimum post-termination exercise periods that may be set forth in an Option Agreement:

- (i) Termination other than Upon Disability or Death or for Cause. In the event of termination of Optionee's Continuous Service Status other than under the circumstances set forth in subsections (ii) through (iv) below, such Optionee may exercise an Option for 30 days following such termination to the extent the Optionee was vested in the Optioned Stock as of the date of such termination. No termination shall be deemed to occur and this Section 10(b)(i) shall not apply if (i) the Optionee is a Consultant who becomes an Employee, or (ii) the Optionee is an Employee who becomes a Consultant.
- (ii) Disability of Optionee. In the event of termination of an Optionee's Continuous Service Status as a result of his or her disability (including a disability within the meaning of Section 22(e)(3) of the Code), such Optionee may exercise an Option at any time within six months following such termination to the extent the Optionee was vested in the Optioned Stock as of the date of such termination.
- (iii) Death of Optionee. In the event of the death of an Optionee during the period of Continuous Service Status since the date of grant of the Option, or within thirty days following termination of Optionee's Continuous Service Status, the Option may be exercised by Optionee's estate or by a person who acquired the right to exercise the Option by bequest or inheritance at any time within twelve months following the date of death, but only to the extent the Optionee was vested in the Optioned Stock as of the date of death or, if earlier, the date the Optionee's Continuous

Service Status terminated.

- (iv) Termination for Cause. In the event of termination of an Optionee's Continuous Service Status for Cause, any Option (including any exercisable portion thereof) held by such Optionee shall immediately terminate in its entirety upon first notification to the Optionee of termination of the Optionee's Continuous Service Status, If an Optionee's employment or consulting relationship with the Company is suspended pending an investigation of whether the Optionee shall be terminated for Cause, all the Optionee's rights under any Option likewise shall be suspended during the investigation period and the Optionee shall have no right to exercise any Option. This Section 10(b)(iv) shall apply with equal effect to vested Shares acquired upon exercise of an Option granted on any date on which the Common Stock is not a Listed Security to a person other than an officer, Director or Consultant, in that the Company shall have the right to repurchase such Shares from the Participant upon the following terms: (A) the repurchase is made within 90 days of termination of the Participant's Continuous Service Status for Cause at the Fair Market Value of the Shares as of the date of termination, (B) consideration for the repurchase consists of cash or cancellation of purchase money indebtedness, and (C) the repurchase right terminates upon the effective date of the Company's initial public offering of its Common Stock. With respect to vested Shares issued upon exercise of an Option granted to any officer, Director or Consultant, the Company's right to repurchase such Shares upon termination of the Participant's Continuous Service Status for Cause shall be made at the Participant's original cost for the Shares and shall be effected pursuant to such terms and conditions, and at such time, as the Administrator shall determine. Nothing in this Section 10(b)(iv) shall in any way limit the Company's right to purchase unvested Shares issued upon exercise of an Option as set forth in the applicable Option Agreement.
- (c) Buyout Provisions. The Administrator may at any time offer to buy out for a payment in cash or Shares an Option previously granted under the Plan based on such terms and conditions as the Administrator shall establish and communicate to the Optionee at the time that such offer is made.
- 11. Stock Purchase Rights.
- (a) Rights to Purchase. When the Administrator determines that it will offer Stock Purchase Rights under the Plan, it shall advise the offeree in writing of the terms, conditions and restrictions related to the offer, including the number of Shares that such person shall be entitled to purchase, the price to be paid, and the time within which such person must accept such offer. In the case of a Stock Purchase Right granted prior to the date, if any, on which the Common Stock becomes a Listed Security and if required by the Applicable Laws at that time, the purchase price of Shares subject to such Stock Purchase Rights shall not be less than 100% of the Fair Market Value of the Shares as of the date of the offer. If the Applicable Laws do not impose the requirements set forth in the preceding sentence and with respect to any Stock Purchase Rights granted after the date, if any, on which the Common Stock becomes a Listed Security, the purchase price of Shares subject to Stock Purchase Rights shall be as determined by the Administrator. The offer to purchase Shares subject to Stock Purchase Rights shall be accepted by execution of a Restricted Stock Purchase Agreement in the form determined by the Administrator.

#### (b) Repurchase Option.

- (i) General. Unless the Administrator determines otherwise, the Restricted Stock Purchase Agreement shall grant the Company a repurchase option exercisable upon the voluntary or involuntary termination of the purchaser's employment with the Company for any reason (including death or disability). Subject to any requirements of the Applicable Laws (including without limitation Section 260.140.42(h) of the Rules of the California Corporations Commissioner), the terms of the Company's repurchase option (including without limitation the price at which, and the consideration for which, it may be exercised, and the events upon which it shall lapse) shall be as determined by the Administrator in its sole discretion and reflected in the Restricted Stock Purchase Agreement.
- (ii) Leave of Absence. The Administrator shall have the discretion to determine whether and to what extent the lapsing of Company repurchase rights shall be tolled during any unpaid leave of absence; provided, however, that in the absence of such determination, such lapsing shall be tolled during any such unpaid leave (unless otherwise required by the Applicable Laws). In the event of military leave, the lapsing of Company repurchase rights shall toll during any unpaid portion of such leave, provided that, upon a Participant's returning from military leave (under conditions that would entitle him or her to protection upon such return under the Uniform Services Employment and Reemployment Rights Act), he or she shall be given "vesting" credit with respect to Shares purchased pursuant to the Restricted Stock Purchase Agreement to the same extent as would have applied had the Participant continued to provide services to the Company throughout the leave on the same terms as he or she was providing services immediately prior to such leave.
- (iii) Termination for Cause. In the event of termination of a Participant's Continuous Service Status for Cause, the Company shall have the right to repurchase from the Participant vested Shares issued upon exercise of a Stock Purchase Right granted to any person other than an officer, Director or Consultant prior to the date, if any, upon which the Common Stock becomes a Listed Security upon the following terms: (A) the repurchase must be made within 90 days of termination of the Participant's Continuous Service Status for Cause at the Fair Market Value of the Shares as of the date of termination, (B) consideration for the repurchase consists of cash or cancellation of purchase money indebtedness, and (C) the repurchase right terminates upon the effective date of the Company's initial public offering of its Common Stock. With respect to vested Shares issued upon exercise of a Stock Purchase Right granted to any officer, Director or Consultant, the Company's right to repurchase such Shares upon termination of such Participant's Continuous Service Status for Cause shall be made at the Participant's original cost for the Shares and shall be effected pursuant to such terms and conditions, and at such time, as the Administrator shall determine. Nothing in this Section 11(b)(ii) shall in any way limit the Company's right to purchase unvested Shares as set forth in the applicable Restricted Stock Purchase Agreement.
- (c) Other Provisions. The Restricted Stock Purchase Agreement shall contain such other terms, provisions and conditions not inconsistent with the Plan as may be determined by the Administrator in its sole discretion. In addition, the provisions of Restricted Stock Purchase Agreements need not be the same with respect to each purchaser.
- (d) Rights as a Stockholder. Once the Stock Purchase Right is exercised, the purchaser shall have the rights equivalent to those of a stockholder, and shall be a stockholder when his or her purchase is entered upon the records of the duly authorized transfer agent of the Company. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Stock Purchase Right is exercised, except as provided in Section 15 of the Plan.

#### 12. Other Stock-Based Awards.

The Board shall have the right to grant other awards based upon the Common Stock having such terms and conditions as the Board may determine, including the grant of shares based upon certain conditions, the grant of securities convertible into Common Stock, the grant of stock appreciation rights and other awards that are comprised of, valued in whole or in part by reference to, or are otherwise based on, shares of Common Stock or other property, may be granted hereunder to Participants ("Other Stock Unit Awards"), including without limitation awards entitling recipients to receive shares of Common Stock to be delivered in the future; provided, however, that no Other Stock Unit Awards shall be made unless and until the terms the Plan and of any such award are in compliance with Section 409A of the Code. Such Other Stock Unit Awards shall also be available as a form of payment in the settlement of other awards granted under the Plan or as payment in lieu of compensation to which a Participant is otherwise entitled. Other Stock Unit Awards may be paid in shares of Common Stock or cash, as the Board shall determine. Subject to the provisions of the Plan, the Board shall determine the conditions of each Other Stock Unit Awards, including any purchase price applicable thereto. At the time any award is granted, the Board may provide that, at the time Common Stock would otherwise be delivered pursuant to the award, the Participant will instead receive an instrument evidencing the Participant's right to future delivery of the Common Stock.

#### 13. Taxes.

- (a) As a condition of the grant, vesting or exercise of an Option or Stock Purchase Right granted under the Plan, the Participant (or in the case of the Participant's death, the person exercising the Option or Stock Purchase Right) shall make such arrangements as the Administrator may require for the satisfaction of any applicable federal, state, local or foreign withholding tax obligations that may arise in connection with such grant, vesting or exercise of the Option or Stock Purchase Right or the issuance of Shares. The Company shall not be required to issue any Shares under the Plan until such obligations are satisfied. If the Administrator allows the withholding or surrender of Shares to satisfy a Participant's tax withholding obligations under this Section 13 (whether pursuant to Section 13(c), (d) or (e), or otherwise), the Administrator shall not allow Shares to be withheld in an amount that exceeds the minimum statutory withholding rates for federal and state tax purposes, including payroll taxes.
- (b) In the case of an Employee and in the absence of any other arrangement, the Employee shall be deemed to have directed the Company to withhold or collect from his or her compensation an amount sufficient to satisfy such tax obligations from the next payroll payment otherwise payable after the date of an exercise of the Option or Stock Purchase Right.
- (c) This Section 13(c) shall apply only after the date, if any, upon which the Common Stock becomes a Listed Security. In the case of Participant other than an Employee (or in the case of an Employee where the next payroll payment is not sufficient to satisfy such tax obligations, with respect to any remaining tax obligations), in the absence of any other arrangement and to the extent permitted under the Applicable Laws, the Participant shall be deemed to have elected to have the Company withhold from the Shares to be issued upon exercise of the Option or Stock Purchase Right that number of Shares having a Fair Market Value determined as of the applicable Tax Date (as defined below) equal to the amount required to be withheld. For purposes of this Section 13, the Fair Market Value of the Shares to be withheld shall be determined on the date that the amount of tax to be withheld is to be determined under the Applicable Laws (the "Tax Date").
- (d) If permitted by the Administrator, in its discretion, a Participant may satisfy his or her tax withholding obligations upon exercise of an Option or Stock Purchase Right by surrendering to the Company Shares that have a Fair Market Value determined as of the applicable Tax Date equal to the amount required to be withheld. In the case of shares previously acquired from the Company that are surrendered under this Section 13(d), such Shares must have been owned by the Participant for more than six (6) months on the date of surrender (or such other period of time as is

required for the Company to avoid adverse accounting charges).

(e) Any election or deemed election by a Participant to have Shares withheld to satisfy tax withholding obligations under Section 13(c) or (d) above shall be irrevocable as to the particular Shares as to which the election is made and shall be subject to the consent or disapproval of the Administrator. Any election by a Participant under Section 13(d) above must be made on or prior to the applicable Tax Date.

- (f) In the event an election to have Shares withheld is made by a Participant and the Tax Date is deferred under Section 83 of the Code because no election is filed under Section 83(b) of the Code, the Participant shall receive the full number of Shares with respect to which the Option or Stock Purchase Right is exercised but such Participant shall be unconditionally obligated to tender back to the Company the proper number of Shares on the Tax Date.
- 14. Non-Transferability of Options and Stock Purchase Rights.
- (a) General. Except as set forth in this Section 14, Options and Stock Purchase Rights may not be sold, pledged, assigned, hypothecated, transferred or disposed of in any manner other than by will or by the laws of descent or distribution. The designation of a beneficiary by an Optionee will not constitute a transfer. An Option or Stock Purchase Right may be exercised, during the lifetime of the holder of an Option or Stock Purchase Right, only by such holder or a transferee permitted by this Section 14.
- (b) Limited Transferability Rights. Notwithstanding anything else in this Section 14, the Administrator may in its discretion grant Nonstatutory Stock Options that may be transferred by instrument to an inter vivos or testamentary trust in which the Options are to be passed to beneficiaries upon the death of the trustor (settlor) or by gift or pursuant to domestic relations orders to "Immediate Family Members" (as defined below) of the Optionee. "Immediate Family" means any child, stepchild, grandchild, parent, stepparent, grandparent, spouse, former spouse, sibling, niece, nephew, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law (including adoptive relationships), a trust in which these persons have more than fifty percent of the beneficial interest, a foundation in which these persons (or the Optionee) control the management of assets, and any other entity in which these persons (or the Optionee) own more than fifty percent of the voting interests.
- 15. Adjustments Upon Changes in Capitalization, Merger or Certain Other Transactions.
- (a) Changes in Capitalization. Subject to any action required under Applicable Laws by the stockholders of the Company, the number of Shares of Common Stock covered by each outstanding award, the numbers of Shares set forth in Sections 3(a) and 8 above, and the number of Shares of Common Stock that have been authorized for issuance under the Plan but as to which no awards have yet been granted or that have been returned to the Plan upon cancellation or expiration of an award, as well as the price per Share of Common Stock covered by each such outstanding award, shall be proportionately adjusted for any increase or decrease in the number of issued Shares of Common Stock resulting from a stock split, reverse stock split, stock dividend, combination, recapitalization or reclassification of the Common Stock, or any other increase or decrease in the number of issued Shares of Common Stock effected without receipt of consideration by the Company; provided, however, that conversion of any convertible securities of the Company shall not be deemed to have been "effected without receipt of consideration." Such adjustment shall be made by the Administrator, whose determination in that respect shall be final, binding and conclusive. Except as expressly provided herein, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number or price of Shares of Common Stock subject to an award.
- (b) Dissolution or Liquidation. In the event of the dissolution or liquidation of the Company, each Option and Stock Purchase Right will terminate immediately prior to the consummation of such action, unless otherwise determined by the Administrator.

- (c) Corporate Transaction. In the event of a Corporate Transaction (including without limitation a Change of Control), each outstanding Option or Stock Purchase Right shall be assumed or an equivalent option or right shall be substituted by such successor corporation or a parent or subsidiary of such successor corporation (the "Successor Corporation"), unless the Successor Corporation does not agree to assume the award or to substitute an equivalent option or right, in which case such Option or Stock Purchase Right shall terminate upon the consummation of the transaction.
- (d) Certain Distributions. In the event of any distribution to the Company's stockholders of securities of any other entity or other assets (other than dividends payable in cash or stock of the Company) without receipt of consideration by the Company, the Administrator may, in its discretion, appropriately adjust the price per Share of Common Stock covered by each outstanding Option or Stock Purchase Right to reflect the effect of such distribution.
- 16. Time of Granting Options and Stock Purchase Rights. The date of grant of an Option or Stock Purchase Right shall, for all purposes, be the date on which the Administrator makes the determination granting such Option or Stock Purchase Right, or such other date as is determined by the Administrator, provided that in the case of any Incentive Stock Option, the grant date shall be the later of the date on which the Administrator makes the determination granting such Incentive Stock Option or the date of commencement of the Optionee's employment relationship with the Company. Notice of the determination shall be given to each Employee, Consultant or Director to whom an Option or Stock Purchase Right is so granted within a reasonable time after the date of such grant.

#### 17. Amendment and Termination of the Plan.

- (a) Authority to Amend or Terminate. The Board may at any time amend, alter, suspend or discontinue the Plan, but no amendment, alteration, suspension or discontinuation (other than an adjustment pursuant to Section 15 above) shall be made that would materially and adversely affect the rights of any Optionee or holder of Stock Purchase Rights under any outstanding grant, without his or her consent. In addition, to the extent necessary and desirable to comply with the Applicable Laws, the Company shall obtain stockholder approval of any Plan amendment in such a manner and to such a degree as required.
- (b) Effect of Amendment or Termination. Except as to amendments which the Administrator has the authority under the Plan to make unilaterally, no amendment or termination of the Plan shall materially and adversely affect Options or Stock Purchase Rights already granted, unless mutually agreed otherwise between the Optionee or holder of the Stock Purchase Rights and the Administrator, which agreement must be in writing and signed by the Optionee or holder and the Company.
- 18. Conditions Upon Issuance of Shares. Notwithstanding any other provision of the Plan or any agreement entered into by the Company pursuant to the Plan, the Company shall not be obligated, and shall have no liability for failure, to issue or deliver any Shares under the Plan unless such issuance or delivery would comply with the Applicable Laws, with such compliance determined by the Company in consultation with its legal counsel. As a condition to the exercise of an Option or Stock Purchase Right, the Company may require the person exercising the award to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required by law. Shares issued upon exercise of awards granted prior to the date on which the Common Stock becomes a Listed Security shall be subject to a right of first refusal in favor of the Company pursuant to which the Participant will be required to offer Shares to the Company before selling or transferring them to any third party on such terms and subject to such conditions as is reflected in the applicable Option Agreement or Restricted Stock Purchase Agreement.

- 19. Reservation of Shares. The Company, during the term of this Plan, will at all times reserve and keep available such number of Shares as shall be sufficient to satisfy the requirements of the Plan.
- 20. Agreements. Options and Stock Purchase Rights shall be evidenced by Option Agreements and Restricted Stock Purchase Agreements, respectively, in such form(s) as the Administrator shall from time to time approve.
- 21. Stockholder Approval. If required by the Applicable Laws, continuance of the Plan shall be subject to approval by the stockholders of the Company within twelve (12) months before or after the date the Plan is adopted. Such stockholder approval shall be obtained in the manner and to the degree required under the Applicable Laws.
- 22. Information and Documents to Optionees and Purchasers. Prior to the date, if any, upon which the Common Stock becomes a Listed Security and if required by the Applicable Laws, the Company shall provide financial statements at least annually to each Optionee and to each individual who acquired Shares pursuant to the Plan, during the period such Optionee or purchaser has one or more Options or Stock Purchase Rights outstanding, and in the case of an individual who acquired Shares pursuant to the Plan, during the period such individual owns such Shares. The Company shall not be required to provide such information if the issuance of Options or Stock Purchase Rights under the Plan is limited to key employees whose duties in connection with the Company assure their access to equivalent information.
- 23. Governing Law. The provisions of this Plan and all awards made hereunder shall be governed by and interpreted in accordance with the laws of the State of California, without regard to any applicable conflicts of law.

Appendix B

Certificate of Amendment of Certificate of Incorporation of Advanced Cell Technology, Inc.

Under Section 242 of the Delaware General Corporation Law

Advanced Cell Technology, Inc., a corporation organized and existing under the laws of the State of Delaware (the "Corporation") hereby certifies as follows:

- 1. The Amended and Restated Certificate of Incorporation of the Corporation is hereby amended by changing ARTICLE V, Section 2, so that, as amended, said ARTICLE V, Section 2 shall be and read as follows:
- Section 2. Number of Authorized Shares. The total number of shares of stock which the Corporation shall have the authority to issue shall be Two Billion Five Hundred Fifty Million (2,550,000,000) shares. The Corporation shall be authorized to issue two classes of shares of stock, designated "Common Stock" and "Preferred Stock." The Corporation shall be authorized to issue One Billion Two Hundred Fifty Million (1,250,000,000) shares of Common Stock, each share to have a par value of \$.001 per share, and Fifty Million (50,000,000) shares of Preferred Stock, each share to have a par value of \$.001 per share.
- 2. The foregoing amendment has been duly adopted in accordance with the provisions of Section 242 of the General Corporation law of the State of Delaware by the vote of a majority of each class of outstanding stock of the Corporation entitled to vote thereon.

IN WITNESS WHEREOF, I have signed this Certificate this \_th day of \_\_\_\_\_\_, 2009

William M. Caldwell, IV Chairman & Chief Executive Officer

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#### **PROXY**

### ADVANCED CELL TECHNOLOGY, INC.

Proxy for the Special Meeting of Stockholders to be held on \_\_\_\_\_\_, 2009

This Proxy is solicited on behalf of the Board of Directors of Advanced Cell Technology, Inc.

The undersigned, revoking all prior proxies, hereby appoint(s) William M. Caldwell, IV, with full power of substitution, as proxy to represent and vote, as designated herein, all shares of stock of Advanced Cell
Technology, Inc., a Delaware corporation (the "Company"), which the undersigned would be entitled to vote if
personally present at the Special Meeting of Stockholders of the Company to be held at on, at
, local time, and at any adjournment thereof (the "Meeting").
This proxy, when properly executed, will be voted in the manner directed herein by the undersigned stockholder. If no direction is given, this proxy will be voted FOR all proposals. Attendance of the undersigned at the Meeting or at any adjournment thereof will not be deemed to revoke this proxy unless the undersigned shall revoke this proxy in writing or shall deliver a subsequently dated proxy to the Secretary of the Company or shall vote in person at the Meeting.
(Continued, and to be signed, on reverse side)

Please date, sign and mail your proxy card back as soon as possible!

### Special Meeting of Stockholders ADVANCED CELL TECHNOLOGY, INC.

, 2009

Please detach and mail in the envelope provided.

Please mark votes as in this example.

1. To amend the Company's 2005 Stock Incentive Plan (the "2005 Stock Plan") to increase the number of shares thereunder by 100,000,000 shares.

FOR the amendment to the 2005 Stock Plan

WITHHOLD AUTHORITY to vote in favor of the amendment to the 2005 Stock Plan

2. To consider and approve an amendment to the Amended and Restated Certificate of Incorporation of Certificate of Incorporation favor of the amendment the Company to effect an increase the number of authorized shares of Common Stock of the Company from 500,000,000 to 1,750,000,000.

FOR the amendment to the Amended and Restated

WITHHOLD AUTHORITY to vote in to the Amended and Restated Certificate of Incorporation

In their discretion, the proxies are authorized to vote upon such other matters as may properly come before the Meeting or any adjournment thereof.

Check here if the Securities and Exchange Commission's "householding" rule applies to you and you wish to continue receiving separate proxy materials without participating in the rule. o

PLEASE FILL IN, DATE, SIGN AND MAIL THIS PROXY IN THE ENCLOSED POSTAGE-PAID RETURN ENVELOPE.

Signature:	Date:
Signature:	Date:

NOTE: Please sign exactly as name appears hereon. If the stock is registered in the names of two or more

persons, each should sign. Executors, administrators, guardians, attorneys and corporate officers

should add their titles.