

**TRADEMARK ASSIGNMENT**

Electronic Version v1.1  
 Stylesheet Version v1.1

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT		
<b>NATURE OF CONVEYANCE:</b>	Change of State of Incorporation		
<b>CONVEYING PARTY DATA</b>			
<b>Name</b>	<b>Formerly</b>	<b>Execution Date</b>	<b>Entity Type</b>
Merrimack Pharmaceuticals, Inc.		07/06/2010	CORPORATION: MASSACHUSETTS
<b>RECEIVING PARTY DATA</b>			
<b>Name:</b>	Merrimack Pharmaceuticals, Inc.		
<b>Street Address:</b>	One Kendall Square, Suite B7201		
<b>City:</b>	Cambridge		
<b>State/Country:</b>	MASSACHUSETTS		
<b>Postal Code:</b>	02139		
<b>Entity Type:</b>	CORPORATION: DELAWARE		
<b>PROPERTY NUMBERS Total: 3</b>			
<b>Property Type</b>	<b>Number</b>	<b>Word Mark</b>	
<b>Registration Number:</b>	3004784	M	
<b>Registration Number:</b>	3004785	M MERRIMACK	
<b>Registration Number:</b>	3004786	M MERRIMACK PHARMACEUTICALS	
<b>CORRESPONDENCE DATA</b>			
<b>Fax Number:</b>	(617)428-7045		
<b>Phone:</b>	6174280200		
<b>Email:</b>	tadministrator@clarkelbing.com		
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>			
<b>Correspondent Name:</b>	Clark & Elbing LLP		
<b>Address Line 1:</b>	101 Federal Street		
<b>Address Line 4:</b>	Boston, MASSACHUSETTS 02110		
<b>ATTORNEY DOCKET NUMBER:</b>	06727/T13002		
<b>NAME OF SUBMITTER:</b>	Jan N. Tittel		

CH \$90.00 3004784

**900204553**

**TRADEMARK**  
**REEL: 004641 FRAME: 0101**

Signature:	/Jan N. Tittel/
Date:	10/13/2011
<p>Total Attachments: 21 source=06727#page1.tif source=06727#page2.tif source=06727#page3.tif source=06727#page4.tif source=06727#page5.tif source=06727#page6.tif source=06727#page7.tif source=06727#page8.tif source=06727#page9.tif source=06727#page10.tif source=06727#page11.tif source=06727#page12.tif source=06727#page13.tif source=06727#page14.tif source=06727#page15.tif source=06727#page16.tif source=06727#page17.tif source=06727#page18.tif source=06727#page19.tif source=06727#page20.tif source=06727#page21.tif</p>	

# Delaware

PAGE 1

*The First State*

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE RESTATED CERTIFICATE OF "MERRIMACK PHARMACEUTICALS, INC.", FILED IN THIS OFFICE ON THE SIXTH DAY OF APRIL, A.D. 2011, AT 8:58 O'CLOCK A.M.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.

4833458 8100

110383493



You may verify this certificate online  
at [corp.delaware.gov/authver.shtml](http://corp.delaware.gov/authver.shtml)

  
Jeffrey W. Bullock, Secretary of State  
AUTHENTICATION: 8674227

DATE: 04-06-11

TRADEMARK  
REEL: 004641 FRAME: 0103

**RESTATED CERTIFICATE OF INCORPORATION**

**OF**

**MERRIMACK PHARMACEUTICALS, INC.**

Merrimack Pharmaceuticals, Inc., a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify that:

1) The name of this corporation is Merrimack Pharmaceuticals, Inc. The original Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on July 6, 2010 (the "**Original Certificate**").

2) This Restated Certificate of Incorporation amends, restates and integrates the provisions of the Original Certificate and was duly adopted in accordance with the provisions of Sections 228, 242 and 245 of the General Corporation Law of the State of Delaware (the "**General Corporation Law**") by the board of directors and stockholders of the Corporation.

3) The text of the Original Certificate is hereby amended and restated in its entirety to read as follows:

**FIRST:** The name of this corporation is Merrimack Pharmaceuticals, Inc. (the "**Corporation**").

**SECOND:** The address of the registered office of the Corporation in the State of Delaware is Corporation Trust Center, 1209 Orange Street, in the City of Wilmington, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.

**THIRD:** The purpose of the Corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law.

**FOURTH:** The total number of shares of all classes of stock which the Corporation shall have authority to issue is 212,780,000 shares, consisting of (i) 138,500,000 shares of Common Stock, \$0.01 par value per share ("**Common Stock**"), and (ii) 74,280,000 shares of Preferred Stock, \$0.01 par value per share ("**Preferred Stock**"), of which:

(A) 6,000,000 shares are designated as Series B Convertible Preferred Stock (the "**Series B Preferred Stock**"), of which (1) 1,018,634 shares of Series B Preferred Stock are designated as Sub-Series B-1 Convertible Preferred Stock (the "**Sub-Series B-1 Preferred Stock**"), (2) 117,220 shares of Series B Preferred Stock are designated as Sub-Series B-2 Convertible Preferred Stock (the "**Sub-Series B-2 Preferred Stock**"), (3) 681,512 shares of Series B Preferred Stock are designated as Sub-Series B-3 Convertible Preferred Stock (the "**Sub-Series B-3 Preferred Stock**"), (4) 1,135,855 shares of Series B Preferred Stock are designated as Sub-Series B-4 Convertible Preferred Stock (the "**Sub-Series B-4 Preferred Stock**"), (5) 258,870 shares of Series B Preferred Stock are designated as Sub-Series B-5 Convertible Preferred Stock (the "**Sub-Series B-5 Preferred Stock**"), (6) 102,902 shares of Series B Preferred Stock are designated as Sub-Series B-6 Convertible Preferred Stock (the

“**Sub-Series B-6 Preferred Stock**”), (7) 227,171 shares of Series B Preferred Stock are designated as Sub-Series B-7 Convertible Preferred Stock (the “**Sub-Series B-7 Preferred Stock**”), (8) 81,113 shares of Series B Preferred Stock are designated as Sub-Series B-8 Convertible Preferred Stock (the “**Sub-Series B-8 Preferred Stock**”), (9) 23,000 shares of Series B Preferred Stock are designated as Sub-Series B-9 Convertible Preferred Stock (the “**Sub-Series B-9 Preferred Stock**”), (10) 227,171 shares of Series B Preferred Stock are designated as Sub-Series B-10 Convertible Preferred Stock (the “**Sub-Series B-10 Preferred Stock**”), and (11) 2,126,552 shares of Series B Preferred Stock are designated as Sub-Series B-11 Convertible Preferred Stock (the “**Sub-Series B-11 Preferred Stock**”),

(B) 15,100,000 shares are designated as Series C Convertible Preferred Stock (the “**Series C Preferred Stock**”), of which (1) 9,725,944 shares of Series C Preferred Stock are designated as Sub-Series C-1 Convertible Preferred Stock (the “**Sub-Series C-1 Preferred Stock**”), (2) 4,169,264 shares of Series C Preferred Stock are designated as Sub-Series C-2 Convertible Preferred Stock (the “**Sub-Series C-2 Preferred Stock**”), (3) 520,670 shares of Series C Preferred Stock are designated as Sub-Series C-3 Convertible Preferred Stock (the “**Sub-Series C-3 Preferred Stock**”), (4) 554 shares of Series C Preferred Stock are designated as Sub-Series C-4 Convertible Preferred Stock (the “**Sub-Series C-4 Preferred Stock**”), (5) 862 shares of Series C Preferred Stock are designated as Sub-Series C-5 Convertible Preferred Stock (the “**Sub-Series C-5 Preferred Stock**”), (6) 408 shares of Series C Preferred Stock are designated as Sub-Series C-6 Convertible Preferred Stock (the “**Sub-Series C-6 Preferred Stock**”), and (7) 682,298 shares of Series C Preferred Stock are designated as Sub-Series C-7 Convertible Preferred Stock (the “**Sub-Series C-7 Preferred Stock**”),

(C) 11,500,000 shares are designated as Series D Convertible Preferred Stock (the “**Series D Preferred Stock**”), of which (1) 5,720,925 shares of Series D Preferred Stock are designated as Sub-Series D-1 Convertible Preferred Stock (the “**Sub-Series D-1 Preferred Stock**”), (2) 2,365,380 shares of Series D Preferred Stock are designated as Sub-Series D-2 Convertible Preferred Stock (the “**Sub-Series D-2 Preferred Stock**”), and (3) 3,413,695 shares of Series D Preferred Stock are designated as Sub-Series D-3 Convertible Preferred Stock (the “**Sub-Series D-3 Preferred Stock**”),

(D) 15,000,000 shares are designated as Series E Convertible Preferred Stock (the “**Series E Preferred Stock**”), of which (1) 14,444,444 shares of Series E Preferred Stock are designated as Sub-Series E-1 Convertible Preferred Stock (the “**Sub-Series E-1 Preferred Stock**”), (2) 546,448 shares of Series E Preferred Stock are designated as Sub-Series E-2 Convertible Preferred Stock (the “**Sub-Series E-2 Preferred Stock**”), and (3) 9,108 shares of Series E Preferred Stock are designated as Sub-Series E-3 Convertible Preferred Stock (the “**Sub-Series E-3 Preferred Stock**”),

(E) 15,680,000 shares are designated as Series F Convertible Preferred Stock (the “**Series F Preferred Stock**”), of which (1) 6,928,320 shares of Series F Preferred Stock are designated as Sub-Series F-1 Convertible Preferred Stock (the “**Sub-Series F-1 Preferred Stock**”), (2) 1,591,543 shares of Series F Preferred Stock are designated as Sub-Series F-2 Convertible Preferred Stock (the “**Sub-Series F-2 Preferred Stock**”), (3) 3,256,132 shares of Series F Preferred Stock are designated as Sub-Series F-3 Convertible Preferred Stock (the “**Sub-Series F-3 Preferred Stock**”), and (4) 3,904,005 shares of Series F Preferred Stock are

designated as Sub-Series F-4 Convertible Preferred Stock (the “**Sub-Series F-4 Preferred Stock**”), and

(F) 11,000,000 shares are designated as Series G Convertible Preferred Stock (the “**Series G Preferred Stock**”).

References herein to the “**Series B Preferred Stock**” shall mean the Sub-Series B-1 Preferred Stock, Sub-Series B-2 Preferred Stock, Sub-Series B-3 Preferred Stock, Sub-Series B-4 Preferred Stock, Sub-Series B-5 Preferred Stock, Sub-Series B-6 Preferred Stock, Sub-Series B-7 Preferred Stock, Sub-Series B-8 Preferred Stock, Sub-Series B-9 Preferred Stock, Sub-Series B-10 Preferred Stock and Sub-Series B-11 Preferred Stock, collectively. References herein to the “**Series C Preferred Stock**” shall mean the Sub-Series C-1 Preferred Stock, Sub-Series C-2 Preferred Stock, Sub-Series C-3 Preferred Stock, Sub-Series C-4 Preferred Stock, Sub-Series C-5 Preferred Stock, Sub-Series C-6 Preferred Stock and Sub-Series C-7 Preferred Stock, collectively. References herein to the “**Series D Preferred Stock**” shall mean the Sub-Series D-1 Preferred Stock, Sub-Series D-2 Preferred Stock and Sub-Series D-3 Preferred Stock, collectively. References herein to the “**Series E Preferred Stock**” shall mean the Sub-Series E-1 Preferred Stock, Sub-Series E-2 Preferred Stock and Sub-Series E-3 Preferred Stock, collectively. References herein to the “**Series F Preferred Stock**” shall mean the Sub-Series F-1 Preferred Stock, Sub-Series F-2 Preferred Stock, Sub-Series F-3 Preferred Stock and Sub-Series F-4 Preferred Stock, collectively. The Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock, Series E Preferred Stock, Series F Preferred Stock and Series G Preferred Stock are collectively referred to as the “**Convertible Preferred Stock**.”

The following is a statement of the designations and the powers, privileges and rights, and the qualifications, limitations or restrictions thereof in respect of each class of capital stock of the Corporation.

#### A. COMMON STOCK

1. General. The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights, powers and preferences of the holders of the Preferred Stock set forth herein.

2. Dividends. The holders of Common Stock shall be entitled to receive dividends with respect to such shares of Common Stock, when and as declared by the Board of Directors of the Corporation, provided, however, that such dividends shall be payable with respect to Common Stock only after all accrued dividends on the Convertible Preferred Stock shall have been paid or declared and a sum sufficient for the payment thereof has been set apart.

3. Liquidation, Dissolution or Winding Up. After payment of all preferential amounts required to be paid to the holders of Convertible Preferred Stock upon the dissolution, liquidation or winding up of the Corporation, the holders of shares of Common Stock then outstanding shall be entitled to receive the remaining assets and funds of the Corporation available for distribution to its stockholders.

4. Voting. The holders of the Common Stock are entitled to one vote for each share of Common Stock held at all meetings of stockholders (and written actions in lieu of meetings);

provided, however, that, except as otherwise required by law, holders of Common Stock, as such, shall not be entitled to vote on any amendment to the Certificate of Incorporation that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to the Certificate of Incorporation or pursuant to the General Corporation Law. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by (in addition to any vote of the holders of one or more series of Preferred Stock that may be required by the terms of the Certificate of Incorporation) the affirmative vote of the holders of shares of capital stock of the Corporation representing a majority of the votes represented by all outstanding shares of capital stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law and no vote of the holders of the shares of Common Stock voting separately as a class shall be required therefor.

## B. PREFERRED STOCK

Unless otherwise indicated, references to “Sections” or “Subsections” in this Part B of this Article Fourth refer to sections and subsections of Part B of this Article Fourth.

1. Dividends. The holders of Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock, Series E Preferred Stock, Series F Preferred Stock and Series G Preferred Stock shall be entitled to receive dividends *pari passu* except to the extent specifically set forth herein. Each share of Sub-Series B-1 Preferred Stock shall accrue dividends at the rate of 4% of the Series B Purchase Price (as hereinafter defined) per annum as if such share had actually been issued and began accruing dividends on May 3, 2001 up to the maximum hereinafter provided, each share of Sub-Series B-2 Preferred Stock shall accrue dividends at the rate of 4% of the Series B Purchase Price per annum as if such share had actually been issued and began accruing dividends on May 31, 2001 up to the maximum hereinafter provided, each share of Sub-Series B-3 Preferred Stock shall accrue dividends at the rate of 4% of the Series B Purchase Price per annum as if such share had actually been issued and began accruing dividends on July 9, 2001 up to the maximum hereinafter provided, each share of Sub-Series B-4 Preferred Stock shall accrue dividends at the rate of 4% of the Series B Purchase Price per annum as if such share had actually been issued and began accruing dividends on October 15, 2001 up to the maximum hereinafter provided, each share of Sub-Series B-5 Preferred Stock shall accrue dividends at the rate of 4% of the Series B Purchase Price per annum as if such share had actually been issued and began accruing dividends on December 21, 2001 up to the maximum hereinafter provided, each share of Sub-Series B-6 Preferred Stock shall accrue dividends at the rate of 4% of the Series B Purchase Price per annum as if such share had actually been issued and began accruing dividends on January 23, 2002 up to the maximum hereinafter provided, each share of Sub-Series B-7 Preferred Stock shall accrue dividends at the rate of 4% of the Series B Purchase Price per annum as if such share had actually been issued and began accruing dividends on August 30, 2002 up to the maximum hereinafter provided, each share of Sub-Series B-8 Preferred Stock shall accrue dividends at the rate of 4% of the Series B Purchase Price per annum as if such share had actually been issued and began accruing dividends on August 31, 2002 up to the maximum hereinafter provided, each share of Sub-Series B-9 Preferred Stock shall accrue dividends at the rate of 4% of the Series B Purchase Price per annum as if such share had actually been issued and began accruing dividends on September 17, 2002 up to the

maximum hereinafter provided, each share of Sub-Series B-10 Preferred Stock shall accrue dividends at the rate of 4% of the Series B Purchase Price per annum as if such share had actually been issued and began accruing dividends on October 8, 2002 up to the maximum hereinafter provided, each share of Sub-Series B-11 Preferred Stock shall accrue dividends at the rate of 4% of the Series B Purchase Price per annum from and after the date of issuance of such share up to the maximum hereinafter provided, each share of Sub-Series C-1 Preferred Stock shall accrue dividends at the rate of 4% of the Series C Purchase Price (as hereinafter defined) per annum as if such share had actually been issued and began accruing dividends on December 12, 2003 up to the maximum hereinafter provided, each share of Sub-Series C-2 Preferred Stock shall accrue dividends at the rate of 4% of the Series C Purchase Price per annum as if such share had actually been issued and began accruing dividends on March 11, 2004 up to the maximum hereinafter provided, each share of Sub-Series C-3 Preferred Stock shall accrue dividends at the rate of 4% of the Series C Purchase Price per annum as if such share had actually been issued and began accruing dividends on April 14, 2004 up to the maximum hereinafter provided, each share of Sub-Series C-4 Preferred Stock shall accrue dividends at the rate of 4% of the Series C Purchase Price per annum as if such share had actually been issued and began accruing dividends on August 12, 2009 up to the maximum hereinafter provided, each share of Sub-Series C-5 Preferred Stock shall accrue dividends at the rate of 4% of the Series C Purchase Price per annum as if such share had actually been issued and began accruing dividends on September 21, 2009 up to the maximum hereinafter provided, each share of Sub-Series C-6 Preferred Stock shall accrue dividends at the rate of 4% of the Series C Purchase Price per annum as if such share had actually been issued and began accruing dividends on May 4, 2010 up to the maximum hereinafter provided, each share of Sub-Series C-7 Preferred Stock shall accrue dividends at the rate of 4% of the Series C Purchase Price per annum from and after the date of issuance of such share up to the maximum hereinafter provided, each share of Series D-1 Preferred Stock shall accrue dividends at the rate of 4% of the Series D Purchase Price (as hereinafter defined) per annum as if such share had actually been issued and began accruing dividends on January 26, 2005 up to the maximum hereinafter provided, each share of Series D-2 Preferred Stock shall accrue dividends at the rate of 4% of the Series D Purchase Price per annum as if such share had actually been issued and began accruing dividends on March 31, 2005 up to the maximum hereinafter provided, each share of Series D-3 Preferred Stock shall accrue dividends at the rate of 4% of the Series D Purchase Price per annum from and after the date of issuance of such share up to the maximum hereinafter provided, each share of Series E-1 Preferred Stock shall accrue dividends at the rate of 4% of the Series E Purchase Price (as hereinafter defined) per annum as if such share had actually been issued and began accruing dividends on March 24, 2006 up to the maximum hereinafter provided, each share of Series E-2 Preferred Stock shall accrue dividends at the rate of 4% of the Series E Purchase Price per annum as if such share had actually been issued and began accruing dividends on December 28, 2007 up to the maximum hereinafter provided, each share of Series E-3 Preferred Stock shall accrue dividends at the rate of 4% of the Series E Purchase Price per annum from and after the date of issuance of such share up to the maximum hereinafter provided, each share of Sub-Series F-1 Preferred Stock shall accrue dividends at the rate of 4% of the Series F Purchase Price (as hereinafter defined) per annum as if such share had actually been issued and began accruing dividends on November 5, 2007 up to the maximum hereinafter provided, each share of Sub-Series F-2 Preferred Stock shall accrue dividends at the rate of 4% of the Series F Purchase Price per annum as if such share had actually been issued and began accruing dividends on April 24, 2008 up to the maximum hereinafter



provided, each share of Sub-Series F-3 Preferred Stock shall accrue dividends at the rate of 4% of the Series F Purchase Price per annum as if such share had actually been issued and began accruing dividends on May 30, 2008 up to the maximum hereinafter provided, each share of Sub-Series F-4 Preferred Stock shall accrue dividends at the rate of 4% of the Series F Purchase Price per annum from and after the date of issuance of such share up to the maximum hereinafter provided and each share of Series G Preferred Stock shall accrue dividends at the rate of 4% of the Series G Purchase Price per annum from and after the date of issuance of such share up to the maximum hereinafter provided (together, the “**Accrued Dividends**”). The Accrued Dividends shall (a) as to the Series B Preferred Stock, be payable only upon (i) an actual liquidation, dissolution or winding up of the Corporation, (ii) a Deemed Liquidation (as defined in Section 2.2), or (iii) a conversion of the Series B Preferred Stock (as provided in Section 4.1), and (b) as to the Series C Preferred Stock, Series D Preferred Stock, Series E Preferred Stock, Series F Preferred Stock and Series G Preferred Stock, be payable only upon (i) an actual liquidation, dissolution or winding up of the Corporation or (ii) a Deemed Liquidation (as defined in Section 2.2). No dividends shall be declared, paid or set aside on any other series or class of capital stock unless a comparable dividend is declared, paid or set aside for each share of Convertible Preferred Stock on an as-converted basis.

2. Liquidation, Dissolution or Winding Up; Certain Mergers, Consolidations and Asset Sales.

2.1 Actual Liquidation. In the event of an actual liquidation, dissolution or winding up of the Corporation, the holders of shares of Convertible Preferred Stock will be entitled to either elect (A) to convert the shares of Convertible Preferred Stock and/or any Accrued Dividends into Common Stock (the conversion of any Accrued Dividends to be determined by dividing (1) the lesser of (a) the amount of unpaid Accrued Dividends on such shares of Convertible Preferred Stock or (b) twenty-five percent (25%) of the Series B Purchase Price, Series C Purchase Price, Series D Purchase Price, Series E Purchase Price, Series F Purchase Price or Series G Purchase Price, as the case may be (subject to adjustment for stock splits, stock dividends and the like), by (2) the then applicable Conversion Price (as defined in Section 4.4)), or (B) to receive, prior to any distribution to holders of Common Stock, (x) a liquidation preference equal to \$4.40197 per share of Series B Preferred Stock (the “**Series B Purchase Price**”) plus applicable, unpaid Accrued Dividends (the “**Series B Liquidation Preference**”), less the amount of any Accrued Dividends converted into Common Stock, (y) a liquidation preference equal to \$1.889 per share of Series C Preferred Stock (the “**Series C Purchase Price**”) plus applicable, unpaid Accrued Dividends (the “**Series C Liquidation Preference**”), less the amount of any Accrued Dividends converted into Common Stock, (z) a liquidation preference equal to \$3.50 per share of Series D Preferred Stock (the “**Series D Purchase Price**”) plus applicable, unpaid Accrued Dividends (the “**Series D Liquidation Preference**”), less the amount of any Accrued Dividends converted into Common Stock, (aa) a liquidation preference equal to \$4.50 per share of Series E Preferred Stock (the “**Series E Purchase Price**”) plus applicable, unpaid Accrued Dividends (the “**Series E Liquidation Preference**”), less the amount of any Accrued Dividends converted into Common Stock, (bb) a liquidation preference equal to \$5.10 per share of Series F Preferred Stock (the “**Series F Purchase Price**”) plus applicable, unpaid Accrued Dividends (the “**Series F Liquidation Preference**”), less the amount of any Accrued Dividends converted into Common Stock, or (cc) a liquidation preference equal to \$7.00 per share of Series G Preferred Stock (the “**Series G**

**Purchase Price**") plus applicable, unpaid Accrued Dividends (the "**Series G Liquidation Preference**"), less the amount of any Accrued Dividends converted into Common Stock. After payment of the Series B Liquidation Preference, Series C Liquidation Preference, Series D Liquidation Preference, Series E Liquidation Preference, Series F Liquidation Preference and Series G Liquidation Preference, the holders of Common Stock shall be entitled to receive the remaining assets of the Corporation available for distribution. If upon such actual liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary, the assets to be distributed among the holders of shares of Convertible Preferred Stock shall be insufficient to permit payment in full to the holders of shares of Convertible Preferred Stock of amounts distributable as aforesaid, then the entire assets of the Corporation to be so distributed shall be distributed ratably among the holders of shares of Convertible Preferred Stock according to the respective amounts which would be payable with respect to such shares of Convertible Preferred Stock upon such distribution if all amounts payable on or with respect to said shares were paid in full.

2.2 Deemed Liquidation. Unless the holders of at least two-thirds of the outstanding shares of Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock, Series E Preferred Stock, Series F Preferred Stock and Series G Preferred Stock each vote (as a separate class) that such events shall not be a deemed liquidation, upon the occurrence of (i) a consolidation of the Corporation with, or merger of the Corporation with or into, another business organization, other than a merger with an affiliate of the Corporation or a merger in which the Corporation is the surviving Corporation and the stockholders of the Corporation prior to such merger continue to hold a majority of the voting power, or (ii) the sale of all or substantially all of the Corporation's business assets (a "**Deemed Liquidation**"), the holders of shares of Convertible Preferred Stock will be entitled to either elect (A) to convert the shares of Convertible Preferred Stock and/or any Accrued Dividends into Common Stock (the conversion of any Accrued Dividends to be determined by dividing (1) the lesser of (a) the amount of unpaid Accrued Dividends on such shares of Convertible Preferred Stock or (b) twenty-five percent (25%) of the Series B Purchase Price, Series C Purchase Price, Series D Purchase Price, Series E Purchase Price, Series F Purchase Price or Series G Purchase Price, as the case may be, by (2) the then applicable Conversion Price (as defined in Section 4.4), (B) to receive, prior to any distribution to holders of Common Stock, the Series B Liquidation Preference, Series C Liquidation Preference, Series D Liquidation Preference, Series E Liquidation Preference, Series F Liquidation Preference or Series G Liquidation Preference, as applicable, less the amount of any Accrued Dividends converted into Common Stock, provided that the aggregate amount received by the holders of Convertible Preferred Stock for each share of Convertible Preferred Stock shall not exceed 125% of the Series B Purchase Price, Series C Purchase Price, Series D Purchase Price, Series E Purchase Price, Series F Purchase Price or Series G Purchase Price, as applicable. After payment of the Series B Liquidation Preference, Series C Liquidation Preference, Series D Liquidation Preference, Series E Liquidation Preference, Series F Liquidation Preference and Series G Liquidation Preference, the holders of Common Stock shall be entitled to receive the remaining assets of the Corporation available for distribution. If upon such Deemed Liquidation, the assets to be distributed among the holders of shares of Convertible Preferred Stock shall be insufficient to permit payment in full to the holders of shares of Convertible Preferred Stock of the amounts distributable as aforesaid, then the entire assets of the Corporation to be so distributed shall be distributed ratably among the holders of shares of Convertible Preferred Stock according to the respective amounts which would be payable with respect to such shares of Convertible Preferred

Stock upon such distribution if all amounts payable on or with respect to said shares were paid in full.

3. Voting.

3.1 General. On any matter presented to the stockholders of the Corporation for their action or consideration at any meeting of stockholders of the Corporation (or by written consent of stockholders in lieu of meeting), each holder of outstanding shares of Convertible Preferred Stock shall be entitled to cast the number of votes equal to the number of whole shares of Common Stock into which such shares of Convertible Preferred Stock held by such holder are convertible as of the record date for determining stockholders entitled to vote on such matter. Except as provided by law or by the other provisions of the Certificate of Incorporation, holders of Convertible Preferred Stock shall vote together with the holders of Common Stock as a single class. In the event that an action to be taken by the stockholders of the Corporation would entitle the holders of the Series B Preferred Stock to a separate vote as a class, then the holders of Sub-Series B-1 Preferred Stock, Sub-Series B-2 Preferred Stock, Sub-Series B-3 Preferred Stock, Sub-Series B-4 Preferred Stock, Sub-Series B-5 Preferred Stock, Sub-Series B-6 Preferred Stock, Sub-Series B-7 Preferred Stock, Sub-Series B-8 Preferred Stock, Sub-Series B-9 Preferred Stock, Sub-Series B-10 Preferred Stock and Sub-Series B-11 Preferred Stock shall vote together as a single class. In the event that an action to be taken by the stockholders of the Corporation would entitle the holders of the Series C Preferred Stock to a separate vote as a class, then the holders of Sub-Series C-1 Preferred Stock, Sub-Series C-2 Preferred Stock, Sub-Series C-3 Preferred Stock, Sub-Series C-4 Preferred Stock, Sub-Series C-5 Preferred Stock, Sub-Series C-6 Preferred Stock and Sub-Series C-7 Preferred Stock shall vote together as a single class. In the event that an action to be taken by the stockholders of the Corporation would entitle the holders of the Series D Preferred Stock to a separate vote as a class, then the holders of Sub-Series D-1 Preferred Stock, Sub-Series D-2 Preferred Stock and Sub-Series D-3 Preferred Stock shall vote together as a single class. In the event that an action to be taken by the stockholders of the Corporation would entitle the holders of the Series E Preferred Stock to a separate vote as a class, then the holders of Sub-Series E-1 Preferred Stock, Sub-Series E-2 Preferred Stock and Sub-Series E-3 Preferred Stock shall vote together as a single class. In the event that an action to be taken by the stockholders of the Corporation would entitle the holders of the Series F Preferred Stock to a separate vote as a class, then the holders of Sub-Series F-1 Preferred Stock, Sub-Series F-2 Preferred Stock, Sub-Series F-3 Preferred Stock and Sub-Series F-4 Preferred Stock shall vote together as a single class.

3.2 Preferred Stock Class Vote. For so long as at least 20% of the maximum number of shares of each of the Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock, Series E Preferred Stock, Series F Preferred Stock and Series G Preferred Stock that were ever outstanding remain outstanding (appropriately adjusted to reflect any stock split, stock dividend or the like), the Corporation shall not without the approval of the holders of a majority of the then outstanding shares of Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock, Series E Preferred Stock, Series F Preferred Stock or Series G Preferred Stock (as applicable), voting separately as a class, given in writing or by vote at a meeting, alter, change or amend the preferences or rights of the Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock, Series E Preferred Stock, Series F Preferred Stock or Series G Preferred Stock in a manner that is adverse to the Series B Preferred Stock, Series C

Preferred Stock, Series D Preferred Stock, Series E Preferred Stock, Series F Preferred Stock or Series G Preferred Stock, as the case may be.

3.3 Preferred Stock Protective Provisions. Without limiting any rights of any stockholders under any other provision of this Article IV, for so long as at least 20% of the maximum number of shares of Convertible Preferred Stock that were ever outstanding remain outstanding (appropriately adjusted to reflect any stock split, stock dividend or the like), the Corporation shall not without the approval of the holders of a majority of the then outstanding shares of Convertible Preferred Stock, voting together as a class, given in writing or by a vote at a meeting:

(a) incur convertible indebtedness or incur indebtedness accompanied by warrants to purchase any class of stock in excess of \$2,500,000;

(b) incur unsecured indebtedness (including any convertible indebtedness or debt accompanied by warrants otherwise permitted) or guarantees in excess of \$5,000,000 in the aggregate;

(c) make material changes in the Corporation's business that cause the Corporation's business to be unrelated to one or more of the fields of biotechnology, proteomics or immunology;

(d) authorize, create or issue shares of any class of stock having, with respect to liquidation or dividends, any rights, privileges or preferences superior to the Convertible Preferred Stock; or

(e) authorize, create or issue shares of any class of stock having rights, privileges or preferences *pari passu* with the Convertible Preferred Stock, unless such class is issued to a venture capital investor, strategic investor or other institutional investor active in the biotechnology industry.

#### 4. Conversion.

4.1 Right to Convert; Conversion Price. Subject to the terms and conditions of this Section 4, the holder of any share or shares of Convertible Preferred Stock shall have the right, at its option at any time from time to time, to convert any such shares of Convertible Preferred Stock into such number of fully paid and nonassessable shares of Common Stock as is obtained by (i) in the case of (a) Series B Preferred Stock, multiplying the number of shares of Series B Preferred Stock so to be converted by the Series B Purchase Price, (b) Series C Preferred Stock, multiplying the number of shares of Series C Preferred Stock so to be converted by the Series C Purchase Price, (c) Series D Preferred Stock, multiplying the number of shares of Series D Preferred Stock so to be converted by the Series D Purchase Price, (d) Series E Preferred Stock, multiplying the number of shares of Series E Preferred Stock so to be converted by the Series E Purchase Price, (e) Series F Preferred Stock, multiplying the number of shares of Series F Preferred Stock so to be converted by the Series F Purchase Price, and (f) Series G Preferred Stock, multiplying the number of shares of Series G Preferred Stock so to be converted by the Series G Purchase Price, and (ii) dividing the result by the then applicable Conversion Price (as defined in Section 4.4). Such rights of conversion shall be exercised by the holder

thereof by giving written notice that the holder elects to convert a stated number of shares of Convertible Preferred Stock into Common Stock and by surrender of a certificate or certificates for the shares so to be converted to the Corporation, together with a statement of the name or names (with address) in which the certificate or certificates for shares of Common Stock shall be issued. Any unpaid Accrued Dividends with respect to any shares of Series B Preferred Stock so converted shall be paid in cash at the time of conversion, in an amount not exceeding the lesser of (x) the amount of unpaid Accrued Dividends on such shares of Series B Preferred Stock or (y) twenty-five percent (25%) of the Series B Purchase Price, except to the extent such conversion is in contemplation of an actual liquidation as provided in Section 2.1 or a Deemed Liquidation as provided in Section 2.2. No payment shall be made on account of any unpaid Accrued Dividends with respect to any shares of Series C Preferred Stock, Series D Preferred Stock, Series E Preferred Stock, Series F Preferred Stock or Series G Preferred Stock so converted, except to the extent such conversion is in contemplation of an actual liquidation as provided in Section 2.1 or a Deemed Liquidation as provided in Section 2.2.

4.2 Issuance of Certificates; Time Conversion Effected. Promptly after the receipt of the written notice referred to in Section 4.1 and surrender of the certificate or certificates for the share or shares of Convertible Preferred Stock to be converted, the Corporation shall issue and deliver, or cause to be issued and delivered, to the holder, registered in such name or names as such holder may direct, a certificate or certificates for the number of whole shares of Common Stock issuable upon the conversion of such share or shares of Convertible Preferred Stock. To the extent permitted by law, such conversion shall be deemed to have been effected and the Conversion Price shall be determined as of the close of business on the date on which such written notice shall have been received by the Corporation and the certificate or certificates for such share or shares shall have been surrendered as aforesaid, and at such time the rights of the holder of such share or shares of Convertible Preferred Stock shall cease, and the person or persons in whose name or names any certificate or certificates for shares of Common Stock shall be issuable upon such conversion shall be deemed to have become the holder or holders of record of the shares represented thereby.

4.3 Fractional Shares; Partial Conversion. No fractional shares shall be issued upon conversion of Convertible Preferred Stock into Common Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock as determined in good faith by the Board of Directors of the Corporation. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Convertible Preferred Stock the holder is at the time converting into Common Stock and the aggregate number of shares of Common Stock issuable upon such conversion. In case the number of shares of Convertible Preferred Stock represented by the certificate or certificates surrendered pursuant to Section 4.1 exceeds the number of shares converted, the Corporation shall, upon such conversion, execute and deliver to the holder, at the expense of the Corporation, a new certificate or certificates for the number of shares of Convertible Preferred Stock represented by the certificate or certificates surrendered which are not to be converted.

4.4 Conversion Price. The initial Conversion Price for shares of Series B Preferred Stock shall be \$2.852, for shares of Series C Preferred Stock shall be \$1.889 (the "**Series C Conversion Price**"), for shares of Series D Preferred Stock shall be \$3.50 (the "**Series**

**D Conversion Price**”), for shares of Series E Preferred Stock shall be \$4.50 (the “**Series E Conversion Price**”), for shares of Series F Preferred Stock shall be \$5.10 (the “**Series F Conversion Price**”), and for shares of Series G Preferred Stock shall be \$7.00 (the “**Series G Conversion Price**”). Except as provided in Section 4.5, if the Corporation, at any time or from time to time after the date on which a share of Series G Preferred Stock was first issued (the “**Series G Issue Date**”), shall issue or sell or, in accordance with Sections 4.4(a) through (f), is deemed to have issued or sold, any shares of Common Stock (a) with respect to the Series B Preferred Stock and Series C Preferred Stock, for a consideration per share less than the Series C Conversion Price in effect immediately prior to the time of such issue or sale and (b) with respect to the Series D Preferred Stock, Series E Preferred Stock, Series F Preferred Stock and Series G Preferred Stock for a consideration per share less than the Series D Conversion Price, Series E Conversion Price, Series F Conversion Price or Series G Conversion Price, as applicable, then in each case the applicable Conversion Price shall be reduced to the price determined as follows:

$$\text{Conversion Price} = \frac{(A \times B) + C}{(A + D)}$$

where:

- A** = the number of shares of Common Stock issued and outstanding immediately prior to such issue or sale (calculated on a fully-diluted basis assuming the conversion of the Convertible Preferred Stock and the exercise, exchange or conversion of all outstanding options, warrants or subscription rights);
- B** = the applicable Conversion Price in effect immediately prior to such issuance or sale;
- C** = the consideration, if any, received by the Corporation upon such issue or sale; and
- D** = the total number of shares of Common Stock issued or sold in such issuance or sale.

For purposes of this Section 4.4, the following shall also be applicable:

(a) Issuance of Rights or Options. In case at any time the Corporation shall in any manner grant (whether directly, indirectly or by assumption in a merger or otherwise) any warrants or other rights to subscribe for or to purchase, or any options for the purchase of, Common Stock or any stock or security convertible into or exchangeable for Common Stock (such warrants, rights or options being called “**Options**” and such convertible or exchangeable stock or securities being called “**Convertible Securities**”) whether or not such Options or the right to convert or exchange any such Convertible Securities are immediately exercisable, and the price per share for which Common Stock is issuable upon the exercise of such Options or upon the conversion or exchange of such Convertible Securities (determined by dividing (i) the total amount, if any, received or receivable by the Corporation as consideration for the granting of such Options, plus the minimum aggregate amount of additional consideration payable to the Corporation upon the exercise of all such Options, plus, in the case of such Options which relate to Convertible Securities, the minimum aggregate amount of additional consideration, if any, payable upon the issue or sale of such Convertible Securities and upon the conversion or exchange thereof, by (ii) the total maximum number of shares of Common Stock issuable upon

the exercise of such Options or upon the conversion or exchange of all such Convertible Securities issuable upon the exercise of such Options) shall be less than the Conversion Price in effect immediately prior to the time of the granting of such Options, then the total maximum number of shares of Common Stock issuable upon the exercise of such Options or upon conversion or exchange of the total maximum amount of such Convertible Securities issuable upon the exercise of such Options shall be deemed to have been issued for such price per share as of the date of granting of such Options or the issuance of such Convertible Securities and thereafter shall be deemed to be outstanding. Except as otherwise provided in Section 4.4(c), no adjustment of the Conversion Price shall be made upon the actual issue of such Common Stock or of such Convertible Securities upon exercise of such Options or upon the actual issue of such Common Stock upon conversion or exchange of such Convertible Securities.

(b) Issuance of Convertible Securities. In case the Corporation shall in any manner issue (whether directly or by assumption in a merger or otherwise) or sell any Convertible Securities, whether or not the rights to exchange or convert any such Convertible Securities are immediately exercisable, and the price per share for which Common Stock is issuable upon such conversion or exchange (determined by dividing (i) the total amount received or receivable by the Corporation as consideration for the issue or sale of such Convertible Securities, plus the minimum aggregate amount of additional consideration, if any, payable to the Corporation upon the conversion or exchange thereof, by (ii) the total maximum number of shares of Common Stock issuable upon the conversion or exchange of all such Convertible Securities) shall be less than the Conversion Price in effect immediately prior to the time of such issue or sale, then the total maximum number of shares of Common Stock issuable upon conversion or exchange of all such Convertible Securities shall be deemed to have been issued for such price per share as of the date of the issue or sale of such Convertible Securities and thereafter shall be deemed to be outstanding, provided that (a) except as otherwise provided in Section 4.4(c), no adjustment of the Conversion Price shall be made upon the actual issue of such Common Stock upon conversion or exchange of such Convertible Securities and (b) if any such issue or sale of such Convertible Securities is made upon exercise of any Options to purchase any such Convertible Securities for which adjustments of the Conversion Price have been or are to be made pursuant to other provisions of this Section 4.4, no further adjustment of the Conversion Price shall be made by reason of such issue or sale.

(c) Change in Option Price of Conversion Rate. Upon the happening of any of the following events, namely, if the purchase price provided for in any Option referred to in Section 4.4(a), the additional consideration, if any, payable upon the conversion or exchange of any Convertible Securities referred to in Section 4.4(a) or (b), or the rate at which Convertible Securities referred to in Section 4.4(a) or (b) are convertible into or exchangeable for Common Stock shall change at any time (including, but not limited to, changes under or by reason of provisions designed to protect against dilution), the Conversion Price in effect at the time of such event shall forthwith be readjusted to the Conversion Price which would have been in effect at such time had such Options or Convertible Securities still outstanding provided for such changed purchase price, additional consideration or conversion rate, as the case may be, at the time initially granted, issued or sold; and on the termination of any such Option or any such right to convert or exchange such Convertible Securities, the Conversion Price then in effect hereunder shall forthwith be increased to the Conversion Price which would have been in effect at the time of such termination had such Option or Convertible Securities, to the extent outstanding

immediately prior to such termination, never been issued, provided, however, that adjustments made pursuant to this Section 4.4(c) shall not result in the Conversion Price being higher than it would have been had such Options or Convertible Securities never been issued.

(d) Consideration for Stock. In case any shares of Common Stock, Options or Convertible Securities shall be issued or sold for cash, the consideration received therefor shall be deemed to be the amount received by the Corporation therefor, without deduction therefrom of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Corporation in connection therewith. In case any shares of Common Stock, Options or Convertible Securities shall be issued or sold for a consideration other than cash, the amount of the consideration other than cash received by the Corporation shall be deemed to be the fair value of such consideration as determined in good faith by the Board of Directors of the Corporation, without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Corporation in connection therewith. In case any Options shall be issued in connection with the issue and sale of other securities of the Corporation, together comprising one integral transaction in which no specific consideration is allocated to such Options by the parties thereto, such Options shall be deemed to have been issued for such consideration as determined in good faith by the Board of Directors of the Corporation.

(e) Record Date. In case the Corporation shall take a record of the holders of its Common Stock for the purpose of entitling them (i) to receive a dividend or other distribution payable in Common Stock, Options or Convertible Securities or (ii) to subscribe for or purchase Common Stock, Options or Convertible Securities, then such record date shall be deemed to be the date of the issue or sale of the shares of Common Stock deemed to have been issued or sold upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase, as the case may be.

(f) Treasury Shares. The disposition of any shares of Common Stock owned or held by or for the account of the Corporation shall be considered an issue or sale of Common Stock for the purpose of this Section 4.4.

4.5 Certain Issues of Common Stock Excepted. Notwithstanding anything to the contrary contained in Section 4.4, the Corporation shall not be required to make any adjustment of the Conversion Price in the case of the issuance, from and after the Series G Issue Date, of (a) up to 18,772,304 shares of Common Stock, including options therefor (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization affecting such shares), issued to employees or directors of, or consultants or advisors to, the Corporation or any of its subsidiaries pursuant to the Corporation's option plan or any other similar equity incentive plans of the Corporation approved by the Board of Directors of the Corporation or the Board of Directors of the Corporation's predecessor, Merrimack Pharmaceuticals, Inc., a Massachusetts corporation (the "**Predecessor**"), whether issued before or after the Series G Issue Date (provided that any options for such shares that expire or terminate unexercised or any restricted stock repurchased by the Corporation at cost shall not be counted toward such maximum number unless and until such shares are regranted as new stock grants (or as new options) pursuant to the terms of any such plan, agreement or arrangement), (b) securities in connection with acquisitions approved by the Board of Directors of the Corporation or the Board of Directors of the Predecessor, (c) securities to financial



institutions or lessors in connection with commercial credit arrangements, equipment financings, leasing (real estate, equipment or otherwise) arrangements or similar arrangements approved by the Board of Directors of the Corporation or the Board of Directors of the Predecessor, (d) securities in connection with strategic alliances, joint ventures, licensing arrangements, collaborations, partnerships or similar arrangements approved by the Board of Directors of the Corporation or the Board of Directors of the Predecessor, (e) shares of Common Stock upon conversion of the Convertible Preferred Stock or securities upon the exercise of the warrants outstanding as of the Series G Issue Date, or shares of Common Stock issuable upon conversion of the Convertible Preferred Stock issuable upon exercise of such warrants, (f) shares of Series G Preferred Stock at or above the Series G Purchase Price, and shares of Common Stock on conversion of such shares of Series G Preferred Stock, or (g) shares of Common Stock in a Qualified Public Offering (as defined in Section 4.14). Collectively, the issuances listed in items (a) through (g) above are hereinafter referred to as the “**Excepted Issuances.**”

4.6 Subdivision or Combination of Common Stock. In case the Corporation shall at any time subdivide (by any stock split, stock dividend or otherwise) its outstanding shares of Common Stock into a greater number of shares, the Conversion Price in effect immediately prior to such subdivision shall be proportionately reduced, and, conversely, in case the outstanding shares of Common Stock shall be combined into a smaller number of shares, the Conversion Price in effect immediately prior to such combination shall be proportionately increased.

4.7 Reorganization or Reclassification. If any capital reorganization or reclassification of the capital stock of the Corporation shall be effected in such a way that holders of Common Stock shall be entitled to receive stock, securities or assets with respect to or in exchange for Common Stock, then, as a condition of such reorganization or reclassification, lawful and adequate provisions shall be made whereby each holder of a share or shares of Convertible Preferred Stock shall thereupon have the right to receive, upon the basis and upon the terms and conditions specified herein and in lieu of the shares of Common Stock immediately theretofore receivable upon the conversion of such share or shares of Convertible Preferred Stock, such shares of stock, securities or assets as may be issued or payable with respect to or in exchange for a number of outstanding shares of such Common Stock equal to the number of shares of such Common Stock immediately theretofore receivable upon such conversion had such reorganization or reclassification not taken place.

4.8 Notice of Adjustment. Upon any adjustment of the Conversion Price, then and in each such case the Corporation shall give written notice thereof by mailing such notice by United States Postal Service, addressed to each holder of shares of Convertible Preferred Stock at the address of such holder as shown on the books of the Corporation, which notice shall state the Conversion Price resulting from such adjustment, setting forth in reasonable detail the method upon which such calculation is based.

4.9 Other Notices. In case at any time: (a) the Corporation shall declare any dividend upon its Common Stock payable in cash or stock or make any other distribution to the holders of its Common Stock; (b) the Corporation shall offer for subscription pro rata to the holders of its Common Stock any additional shares of stock of any class or other rights; (c) there shall be any capital reorganization or reclassification of the capital stock of the Corporation, or a

consolidation or merger of the Corporation with or into another entity or entities, or a sale, lease, abandonment, transfer or other disposition of all or substantially all its assets; or (d) there shall be a voluntary or involuntary dissolution, liquidation or winding up of the Corporation; then, in any one or more of said cases, the Corporation shall provide the holders of Convertible Preferred Stock, to the extent feasible, (i) at least 20 days' prior written notice of the date on which the books of the Corporation shall close or a record shall be taken for such dividend, distribution or subscription rights or for determining rights to vote in respect of any such reorganization, reclassification, consolidation, merger, disposition, dissolution, liquidation or winding up and (ii) in the case of any such reorganization, reclassification, consolidation, merger, disposition, dissolution, liquidation or winding up, at least 20 days' prior written notice of the date when the same shall take place. Such notice in accordance with the foregoing clause (i) shall also specify, in the case of any such dividend, distribution or subscription rights, the date on which the holders of Common Stock shall be entitled thereto and such notice in accordance with the foregoing clause (ii) shall also specify the date on which the holders of Common Stock shall be entitled to exchange their Common Stock for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, disposition, dissolution, liquidation or winding up, as the case may be.

4.10 Stock to be Reserved. The Corporation will at all times reserve and keep available out of its authorized Common Stock, solely for the purpose of issuance upon the conversion of Convertible Preferred Stock as herein provided, such number of shares of Common Stock as may then be issuable upon the conversion of all outstanding shares of Convertible Preferred Stock. The Corporation covenants that all shares of Common Stock which shall be so issued shall be duly and validly issued and fully paid and nonassessable and free from all taxes, liens and charges with respect to the issue thereof, and, without limiting the generality of the foregoing, the Corporation covenants that it will from time to time take all such action as may be requisite to assure that the par value per share of the Common Stock is at all times equal to or less than the Conversion Price in effect at the time. The Corporation will take all such action as may be necessary to assure that all such shares of Common Stock may be so issued without violation of an applicable law or regulation, or of any requirement of any national securities exchange upon which the Common Stock may be listed. The Corporation will not take any action which results in any adjustment of the Conversion Price if the total number of shares of Common Stock issued and issuable after such action upon conversion of the Convertible Preferred Stock would exceed the total number of shares of Common Stock then authorized by the Certificate of Incorporation.

4.11 No Reissuance of Convertible Preferred Stock. Shares of Convertible Preferred Stock which are converted into shares of Common Stock as provided herein shall not be reissued.

4.12 Issue Tax. The issuance of certificates for shares of Common Stock upon conversion of Convertible Preferred Stock shall be made without charge to the holders thereof for any issuance tax in respect thereof, provided that the Corporation shall not be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of any certificate in a name other than that of the holder of the Convertible Preferred Stock which is being converted.

4.13 Closing of Books. The Corporation will at no time close its transfer books against the transfer of any Convertible Preferred Stock or of any shares of Common Stock issued or issuable upon the conversion of any shares of Convertible Preferred Stock in any manner which interferes with the timely conversion of such Convertible Preferred Stock, except as may otherwise be required to comply with applicable securities laws.

4.14 Mandatory Conversion. If at any time the Corporation shall effect a firm commitment underwritten public offering of shares of Common Stock by a reputable underwriter reasonably acceptable to a majority of the Convertible Preferred Stock (which shall be evidenced by vote or written consent of holders of at least fifty-one percent (51%) of the outstanding shares of Convertible Preferred Stock) pursuant to an effective registration statement filed under the Securities Act of 1933, as amended, with a per share offering price equal to or greater than the greater of \$4.40 or 250% of the Conversion Price then in effect for the Series C Preferred Stock (subject to adjustment for stock splits, stock dividends and the like), which results in aggregate gross proceeds to the Corporation of at least \$50,000,000 (a "**Qualified Public Offering**"), then effective upon the closing of such Qualified Public Offering, all outstanding shares of Convertible Preferred Stock shall automatically convert to shares of Common Stock on the basis set forth in this Section 4 (but not any Accrued Dividends with respect to Convertible Preferred Stock, which Accrued Dividends shall be paid in cash upon any such conversion). If at any time the holders of a majority in interest of the then outstanding shares of Convertible Preferred Stock, voting together as a class, shall exercise their rights to convert such shares, all outstanding shares of Convertible Preferred Stock shall, at the option of the Corporation, convert to shares of Common Stock on the basis set forth herein.

4.15. Waiver. Notwithstanding anything to the contrary herein, any adjustment in the Conversion Price set forth in this Section 4 may be waived in its entirety as to any series of Convertible Preferred Stock by the vote of holders of at least fifty-one percent (51%) of the outstanding shares of such series of Convertible Preferred Stock (as determined immediately prior to the action causing such adjustment).

5. Termination of Provisions Upon Qualified Public Offering. Notwithstanding anything to the contrary contained herein, the rights, privileges and preferences granted to the holders of Convertible Preferred Stock, as the case may be, as set forth in Section 1 (Dividends), Section 2 (Liquidation) and Section 3 (Voting), shall terminate and be of no further force and effect upon the mandatory conversion of the Convertible Preferred Stock in accordance with Section 4.14.

6. Amendments. Except as specifically set forth herein, no provision of these terms of the Convertible Preferred Stock may be amended, modified or waived without the written consent or affirmative vote of the holders of at least fifty-one percent (51%) of the then outstanding shares of any series of Convertible Preferred Stock as to which such provision is applicable before or after such amendment, modification or waiver is effective.

**FIFTH:** Subject to any additional vote required by the Certificate of Incorporation or Bylaws, in furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, repeal, alter, amend and rescind any or all of the Bylaws of the Corporation.

**SIXTH:** Subject to any additional vote required by the Certificate of Incorporation, the number of directors of the Corporation shall be determined in the manner set forth in the Bylaws of the Corporation.

**SEVENTH:** Elections of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

**EIGHTH:** Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws of the Corporation may provide. The books of the Corporation may be kept outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation.

**NINTH:** To the fullest extent permitted by law, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the General Corporation Law or any other law of the State of Delaware is hereafter amended to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law as so amended.

Any repeal or modification of the foregoing provisions of this Article Ninth shall not adversely affect any right or protection of a director of the Corporation existing at the time of, or increase the liability of any director of the Corporation with respect to any acts or omissions of such director occurring prior to, such repeal or modification.

**TENTH:** The following indemnification and expense advancement provisions shall apply to the persons enumerated below.

1. Right to Indemnification of Directors and Officers. The Corporation shall indemnify and hold harmless, to the fullest extent permitted by applicable law as it presently exists or may hereafter be amended, any person (an "**Indemnified Person**") who was or is made or is threatened to be made a party or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (a "**Proceeding**"), by reason of the fact that such person, or a person for whom such person is the legal representative, is or was a director or officer of the Corporation or, while a director or officer of the Corporation, is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, limited liability company, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys' fees) reasonably incurred by such Indemnified Person in such Proceeding. Notwithstanding the preceding sentence, except as otherwise provided in Section 3 of this Article Tenth, the Corporation shall be required to indemnify an Indemnified Person in connection with a Proceeding (or part thereof) commenced by such Indemnified Person only if the commencement of such Proceeding (or part thereof) by the Indemnified Person was authorized in advance by the Board of Directors.

2. Prepayment of Expenses of Directors and Officers. The Corporation shall pay the expenses (including attorneys' fees) incurred by an Indemnified Person in defending any

Proceeding in advance of its final disposition, provided, however, that, to the extent required by law, such payment of expenses in advance of the final disposition of the Proceeding shall be made only upon receipt of an undertaking by the Indemnified Person to repay all amounts advanced if it should be ultimately determined that the Indemnified Person is not entitled to be indemnified under this Article Tenth or otherwise.

3. Claims by Directors and Officers. If a claim for indemnification or advancement of expenses under this Article Tenth is not paid in full within 30 days after a written claim therefor by the Indemnified Person has been received by the Corporation, the Indemnified Person may file suit to recover the unpaid amount of such claim and, if successful in whole or in part, shall be entitled to be paid the expense of prosecuting such claim to the fullest extent permitted by law. In any such action the Corporation shall have the burden of proving that the Indemnified Person is not entitled to the requested indemnification or advancement of expenses under applicable law.

4. Indemnification of Employees and Agents. The Corporation may indemnify and advance expenses to any person who was or is made or is threatened to be made or is otherwise involved in any Proceeding by reason of the fact that such person, or a person for whom such person is the legal representative, is or was an employee or agent of the Corporation or, while an employee or agent of the Corporation, is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, limited liability company, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorney's fees) reasonably incurred by such person in connection with such Proceeding. The ultimate determination of entitlement to indemnification of persons who are non-director or officer employees or agents shall be made in such manner as is determined by the Board of Directors in its sole discretion. Notwithstanding the foregoing sentence, the Corporation shall not be required to indemnify a person in connection with a Proceeding initiated by such person if the Proceeding was not authorized in advance by the Board of Directors.

5. Advancement of Expenses of Employees and Agents. The Corporation may pay the expenses (including attorney's fees) incurred by an employee or agent in defending any Proceeding in advance of its final disposition on such terms and conditions as may be determined by the Board of Directors.

6. Non-Exclusivity of Rights. The rights conferred on any person by this Article Tenth shall not be exclusive of any other rights which such person may have or hereafter acquire under any statute, provision of the certificate of incorporation, these by-laws, agreement, vote of stockholders or disinterested directors or otherwise.

7. Other Indemnification or Advancement. The Corporation's obligation, if any, to indemnify or advance expenses to any person who was or is serving at its request as a director, officer or employee of another Corporation, partnership, limited liability company, joint venture, trust, organization or other enterprise shall be reduced by any amount such person may collect as indemnification or advancement, respectively, from such other Corporation, partnership, limited liability company, joint venture, trust, organization or other enterprise.

8. Insurance. The Board of Directors may, to the full extent permitted by applicable law as it presently exists, or may hereafter be amended from time to time, authorize an appropriate officer or officers to purchase and maintain at the Corporation's expense insurance: (a) to indemnify the Corporation for any obligation which it incurs as a result of the indemnification of directors, officers and employees under the provisions of this Article Tenth; and (b) to indemnify or insure directors, officers and employees against liability in instances in which they may not otherwise be indemnified by the Corporation under the provisions of this Article Tenth.

9. Amendment or Repeal. Any amendment, repeal or modification of the foregoing provisions of this Article Tenth shall not adversely affect any right or protection hereunder of any person in respect of any act or omission occurring prior to the time of such amendment, repeal or modification. The rights provided hereunder shall inure to the benefit of any Indemnified Person and such person's heirs, executors and administrators.

*[Remainder of Page Intentionally Left Blank]*

IN WITNESS WHEREOF, this Restated Certificate of Incorporation has been executed by the President and Chief Executive Officer of this corporation on this 6<sup>th</sup> day of April, 2011.

By: /s/ Robert J. Mulroy  
Robert J. Mulroy  
President and Chief Executive Officer