

SCHEDULE 14A INFORMATION
Proxy Statement Pursuant to Section 14(a) of the Securities
Exchange Act of 1934

Filed by the Registrant ☒
Filed by a Party other than the Registrant ☐

Check the appropriate box:

☒ Preliminary Proxy Statement
☐ Confidential, for use of the Commission only (as permitted by Rule 14a-6(e)(2))
☐ Definitive Proxy Statement
☐ Definitive Additional Materials
☐ Soliciting Material Under Rule 14a-12

IGENE Biotechnology, Inc.

(Name of Registrant as Specified in Its Charter)

N/A

(Name of Person(s) Filing Proxy Statement, if Other Than the Registrant)

Payment of Filing Fee (Check the appropriate box):

☒ No fee required
☐ Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

(1) 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:

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☐ Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11 (a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or 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:

**IGENE BIOTECHNOLOGY, INC.
9110 Red Branch Road
Columbia, Maryland 21045**

**Notice of Annual Meeting Of Stockholders
To Be Held November 3, 2008**

NOTICE IS HEREBY GIVEN that the 2008 Annual Meeting of Stockholders of IGENE Biotechnology, Inc. (the "Company", "we" or "us") will be held at the offices of Kimelman & Baird, LLC, 100 Park Avenue, 21st floor, New York, New York 10017 at 10:00 a.m. local time on November 3, 2008 for the following purposes:

1. To elect five (5) directors to serve for a term of one (1) year and until their successors are elected and qualified.
2. To authorize and approve an amendment to the Articles of Incorporation to increase the number of authorized shares of common stock from 750,000,000 to 3,000,000,000 shares.
3. To approve the amendment to the Company's 2001 Stock Incentive Plan to increase the number of shares available from 55,000,000 to 300,000,000.
4. To transact such other business as may properly come before the meeting, or any adjournment thereof.

Stockholders of record at the close of business on October 3, 2008 shall be entitled to notice of, and to vote at, the meeting.

All stockholders are cordially invited to attend the meeting.

By order of the Board of Directors,

/S/ STEPHEN F. HIU
STEPHEN F. HIU
President

Dated: Columbia, Maryland
October 3, 2008

IMPORTANT: PLEASE FILL IN, DATE, SIGN AND MAIL PROMPTLY THE ENCLOSED PROXY IN THE POSTAGE-PAID ENVELOPE PROVIDED TO ASSURE THAT YOUR SHARES ARE REPRESENTED AT THE MEETING.

IGENE BIOTECHNOLOGY, INC.
9110 RED BRANCH ROAD
COLUMBIA, MARYLAND 21045

PROXY STATEMENT

The accompanying proxy is solicited by the Board of Directors (or the "Board") of IGENE Biotechnology, Inc., a Maryland corporation (the "Company", "we" or "us"), for use at our 2008 Annual Meeting of Stockholders, which we refer to as the "meeting," to be held on November 3, 2008, or any adjournment thereof. Holders of record of our common stock, par value \$.01, and our Series A, 8% Cumulative Preferred Stock (the "Series A preferred stock"), at the close of business on October 3, 2008 (the "record date"), shall be entitled to vote at the meeting. Proposals of stockholders intended to be presented at our 2009 Annual Meeting of Stockholders must be received by us no later than 5:00 P.M. local time on March 1, 2009, to be eligible for inclusion in our proxy statement and form of proxy to be used in connection with such meeting.

The cost of solicitation of proxies will be borne by us. We may use the services of our directors, officers, employees and others to solicit proxies, personally or by telephone. Arrangements may also be made with brokerage houses and other custodians, nominees, fiduciaries and stockholders of record to forward solicitation material to the beneficial owners of stock held of record by such persons. We may reimburse such solicitors for reasonable out-of-pocket expenses incurred by them in soliciting, but no compensation will be paid for their services.

Each proxy executed and returned by a stockholder may be revoked at any time before it is voted by timely submission of written notice of revocation or by submission of a duly executed proxy bearing a later date (in either case directed to our Corporate Secretary at the above address) or, if a stockholder is present at the meeting, the stockholder may elect to revoke his or her proxy by voting his or her shares in person at the meeting.

There is being mailed herewith to each stockholder of record our Annual Report on Form 10-KSB for the fiscal year ended December 31, 2007 and our Quarterly Report on Form 10-Q for the quarter ended June 30, 2008. The notice, proxy statement, enclosed form of proxy, Form 10-KSB and Form 10-Q will be mailed to stockholders of record beginning October 3, 2008. The Company's website address is www.igene.com.

On the record date, there were 110,337,072 shares of common stock outstanding and entitled to vote with respect to all matters to be acted upon at the meeting. Each holder of common stock is entitled to one vote for each share of common stock held by such holder.

On the record date, we also had 11,134 shares of our Series A preferred stock outstanding and entitled to vote with respect to all matters to be acted upon at the meeting. Each holder of our Series A preferred stock is entitled to two votes for each share of Series A preferred stock held by such holder. Holders of record of our outstanding shares of common stock and Series A preferred stock will be entitled to vote together as a single class on all matters to be voted on at the meeting.

Pursuant to the terms of our Series A preferred stock, as a consequence of the non-payment of dividends on such stock for more than the past four consecutive dividend payment dates, the holders of Series A preferred stock, voting together as a single class, are entitled to elect two directors, in accordance with the procedures set forth in our Articles of Incorporation, as amended (the "Articles of Incorporation") and bylaws. To date, the holders of the Series A preferred stock have not exercised such right.

Voting Procedures

The presence of holders representing a majority of all the votes entitled to be cast at the meeting will constitute a quorum at the meeting. In accordance with Maryland law, abstentions, but not broker non-votes, are counted for purposes of determining the presence or absence of a quorum for the transaction of business.

The plurality of votes cast at the meeting is required to elect each of our director nominees under Proposal No. 1. The affirmative vote of holders of at least two-thirds of the outstanding voting power of the Company entitled to be cast at the meeting is required to approve Proposal No. 2, the amendment to the Articles of Incorporation increasing the number of authorized shares of common stock to 3,000,000,000. The affirmative vote of holders of at least a majority of the votes cast on Proposal No. 3 is required to approve the amendment to the 2001 Plan to increase the number of shares available under the 2001 Plan to 300,000,000. The votes will be tabulated by the Company's Corporate Secretary. Abstentions and broker non-votes are not counted in determining the votes cast with respect to any of the matters submitted to a vote of stockholders.

PROPOSAL NO. 1: ELECTION OF DIRECTORS

Pursuant to our bylaws and as permitted by our Articles of Incorporation, as amended, the Board has fixed the number of directors at eight. It is proposed to elect five directors at this meeting to hold office for a one-year term, until the 2009 annual meeting of stockholders, and until their respective successors are duly elected and qualified. The Company has recommended fewer nominees for directorships than have been fixed by the Board under our bylaws, as the Board has determined the current nominees are appropriate at this time. The Board has not yet determined whether to fill such vacancies and may reduce the size of the Board to eliminate one or more of the vacancies. Proxies cannot be voted for more than five directors at the meeting. Each of the persons listed below has been nominated for election to our Board at the meeting. All of the nominees listed below presently serve on our Board. If some unexpected occurrence should make necessary, in the Board's judgment, the substitution of some other person or persons for any of the nominees, shares for which proxies have been granted will be voted for such other person or persons as the Board may select. The Board is not aware that any current director, or nominee, may be unable or unwilling to serve as a director. The following table contains certain information with respect to the nominees:

NOMINEES FOR ELECTION

<u>Name</u>	<u>Age</u>	<u>Position with Igene</u>
Michael G. Kimelman	69	Chairman of the Board of Directors ¹
Thomas L. Kempner	80	Vice Chairman of the Board of Directors ²
Stephen F. Hiu	51	Director, President, Chief Technical Officer, and Director of Research and Development
Patrick F. Monahan	57	Director, Vice-President, Secretary, and Director of Manufacturing
Sidney R. Knafel	77	Director ²

¹ Member of the audit committee of the Board of Directors.

² Member of the compensation committee of the Board of Directors.

Each of our directors was elected for a one-year term at the Company's most recent annual meeting, held in July of 2006, and because no annual stockholder meeting was held in 2007, is currently holding-over from his prior term.

MICHAEL G. KIMELMAN has served as a director of the Company and as Chairman of the Board of Directors since 1991. At the time of his election as director and through the present, Mr. Kimelman has been a founder and member of Kimelman & Baird, LLC, an investment advisory firm. Mr. Kimelman also serves on the board and the executive committee of the Hambletonian Society.

THOMAS L. KEMPNER is Vice Chairman of the Board of Directors and has been a director of the Company since its inception in 1981. He also has been Chairman and Chief Executive Officer of Loeb Partners Corporation, investment bankers, New York, and its predecessors since 1978. Mr. Kempner is currently a director of CCC Information Services Group, Inc., Dyax Corporation, Fuel Cell Energy, Inc., Insight Communications Co., Inc., Intermagnetics General Corp. and Intersections, Inc. He is also a director emeritus of Northwest Airlines, Inc.

STEPHEN F. HIU has served as Chief Technical Officer since 2002, and has served as President and Treasurer of the Company since 1999. Mr. Hiu has served as a director since 1990 and has been the Company's Director of Research and Development since 1989 and, prior thereto, was Senior Scientist since he joined the Company in 1985. Mr. Hiu was a post-doctoral Research Associate at the Virginia Polytechnic Institute and State University, Blacksburg, Virginia, from January 1984 until December 1985. Dr. Hiu holds a Ph.D. degree in microbiology from Oregon State University and a B.S. degree in biological sciences from the University of California, Irvine.

PATRICK F. MONAHAN has served as Vice-President of the Company since 2002, and as Director of Manufacturing and as a director of the Company since 1991. Mr. Monahan has also served as Secretary of the Company since September 1998 and has managed the Company's fermentation pilot plant since 1982. He received an Associate of Arts degree in biology from Allegheny Community College and a B.S. degree in biology with a minor in Chemistry from Frostburg State College, Frostburg, Maryland.

SIDNEY R. KNAFEL has served as a director of the Company since 1982. He has also been Managing Partner of SRK Management Company, a private investment company located in New York City, since 1981 and has served as Chairman of Insight Communications, Inc. since 1985. Mr. Knafel is also currently a director of General American Investors Company, Inc., as well as a number of private companies.

**OUR BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE ELECTION OF EACH OF THE
DIRECTOR NOMINEES.**

Committees of the Board of Directors

We have two standing committees of the board of directors, our audit committee and our compensation committee. We do not have a standing nominating committee. Since the Board of Directors consists of five persons, each director participates in the consideration of director nominees. Given the size of the Company and its resources, the Board believes that this is appropriate. The Company has not adopted a formal process relating to director nominations, nor does it have a formal policy regarding the consideration of any director candidates recommended by stockholders or specific minimum qualifications for director nominees. The Board believes this is appropriate since any such recommendations may be informally submitted to and considered by the Company's directors. Stockholders wishing to communicate with the Board should send their communications addressed to the Board at the principal executive offices of the Company. The Board periodically reviews the performance of each Board member and concludes whether or not the member should continue in their current capacity. Since the Company only has a limited number of employees, it has not adopted a code of ethics.

Set forth below is a description of the functions of each of our standing committees and the members of the board of directors who serve on such committees.

Audit Committee

The responsibilities of the audit committee include recommending to the board of directors the independent certified public accountants to conduct the annual audit of our books and accounts, reviewing the proposed scope of the audit and approving the audit fees to be paid. The audit committee is charged with reviewing, with the independent certified public accountants and with our management, the adequacy and effectiveness of our internal auditing, accounting and financial controls. Mr. Kimelman served as the sole member of the audit committee throughout 2007. Mr. Kimelman is not independent as defined in Rule 4200(a)(15) of the Nasdaq Marketplace Rules, based on his ownership percentage of the Company's securities. Please see the section of this proxy statement titled "Security Ownership of Certain Beneficial Owners and Management" for more information about

Mr. Kimelman's holdings. The audit committee charter is attached as Appendix II. The audit committee held four meetings in 2007 to review the Company's 2006 audited financial statements and three quarterly unaudited financial statements.

Audit Committee Report

The audit committee has reviewed and discussed the fiscal year 2007 and 2006 audited financial statements with management, and has discussed with the independent auditors the matters required to be discussed by the statement on Auditing Standards No. 61, as amended, "Communication With Audit Committees" issued by the Auditing Standards Board of the American Institute of Certified Public Accountants ("AICPA"), as modified or supplemented, and has received the written disclosures and the letter from the independent auditors required by AICPA Independence Standards Board Standard No. 1 "Independence Discussions with Audit Committees," as modified or supplemented, and has discussed with the independent auditor the auditors' independence.

Based on the review and discussions referred to in the previous paragraph, the audit committee recommended to the board of directors that the audited financial statements be included in our annual report on Form 10-KSB for the year ended December 31, 2007.

Michael G. Kimelman, the sole member of the audit committee.

Compensation Committee

Our compensation committee is responsible for approving the salaries of all of our officers and certain other employees. It also supervises the administration of all benefit plans and other matters affecting executive compensation, subject to further approval of our board of directors. The members of the compensation committee during 2007 were Messrs. Thomas L. Kempner and Sidney R. Knafel. The compensation committee held one meeting during 2007 for the purposes of considering employee share grants. The compensation committee does not have a written charter. Compensation of executives and directors is at the discretion of the compensation committee.

Director and Committee Independence

Since the Company is not a listed company, it has determined to apply Rule 4200(a)(15) of the Nasdaq Marketplace Rules to determine independence of its directors. Based on such rule, the Company has determined that none of its directors are independent. Accordingly, the members of the Company's audit and compensation committees are not independent.

Board of Directors Meetings and Compensation

The board of directors held one meeting in 2007. None of our directors attended fewer than 75% of the total number of meetings held by the board and by all committees of the board on which he served during 2007. Board members are encouraged, but not required, to attend our annual meeting of stockholders. Four directors attended our last annual meeting held in 2006.

Executive Officers

Our executive officers are listed below, in addition to Messrs. Hui and Monahan, who are listed above as director nominees. Our officers serve at the discretion of the Board of Directors and until their respective successors are elected and qualified.

<u>Name</u>	<u>Age</u>	<u>Position with Igene</u>
Edward J. Weisberger	44	Chief Financial Officer

EDWARD J. WEISBERGER has served as Chief Financial Officer of the Company since 2001. He is a CPA with multiple years of financial experience in the public and private sectors with both smaller and Fortune 100 companies.

Executive Compensation

The following tables show the compensation paid or accrued by the Company to each of the three executive officers (the “named executive officers”). Other than the 2001 Stock Incentive Plan and the 401k Retirement Plan, the Company has no profit sharing or incentive compensation plans.

Summary Compensation Table

<u>Name and Principal Position</u>	<u>Year</u>	<u>Salary \$(1)</u>	<u>Stock Awards \$(2)</u>	<u>All Other Compensation \$(2)</u>	<u>Total (\$)</u>
Stephen Hui President	2007	\$ 153,886	\$ 0	\$ 6,396	\$ 160,282
	2006	142,580	0	6,575	149,155
Patrick Monahan Vice-President, Secretary and Director of Manufacturing	2007	137,914	10,000 (3)	5,968	153,882
	2006	129,965	0	5,838	135,803
Edward Weisberger Chief Financial Officer	2007	132,793	0	5,712	138,505
	2006	125,817	0	5,750	131,567

- (1) Gross Salary of the named executive officers listed.
- (2) Includes annual taxable compensation for health insurance premium and employer match of 401(k).
- (3) Includes issuance of 1,000,000 shares of the Company’s common stock at \$.01 per share value based on current stock price in addition to restriction and blockage discounts.

There are no employment agreements or arrangements, written or unwritten, for any of the executive officers.

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth information concerning the outstanding equity awards of each of the named executive officers as of December 31, 2007. All options reflected on the table are fully vested.

Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Option Exercise Price (\$/Share)	Option Expiration Date
Stephen Hiu	2,000,000	\$.10	04/16/2008
	2,000,000	.05	01/19/2010
	45,000	.065	01/02/2011
	4,800,000	.025	08/13/2012
	5,000,000	.10	06/25/2014
Patrick Monahan	1,050,000	.10	04/16/2008
	1,317,500	.05	01/19/2010
	2,900,000	.025	08/13/2012
	2,000,000	.10	06/25/2014
Edward Weisberger	2,500,000	.05	12/01/2011
	500,000	.10	06/25/2014
	1,500,000	.027	12/09/2015

Retirement Benefits

There are no retirement benefits or any contracts, plans or arrangements, written or unwritten, that provide payment to named executive officers in connection with their resignation, retirement or other termination.

Director Compensation

During 2007, no directors were compensated for their Board or committee activities.

Security Ownership of Certain Beneficial Owners and Management

The following table sets forth information as of September 9, 2008 with respect to beneficial ownership of shares of the Company's outstanding common stock by (i) each person known to the Company to own or beneficially own more than five percent of its common stock or preferred stock, (ii) each director of the Company, and (iii) each named executive officer, and (iv) all directors and executive officers as a group. On September 9, 2008 there were 110,337,072 shares of common stock issued and outstanding. Shares of common stock subject to options or warrants currently exercisable or exercisable within 60 days of September 9, 2008 are deemed outstanding for computing the share ownership and percentage of the person holding such options and warrants, but are not deemed outstanding for computing the percentage of any other person. Unless otherwise noted below, each beneficial owner listed on the table below has sole voting and investment power with respect to their shares beneficially owned. No shares of preferred stock are beneficially owned by the persons listed below.

<u>Name and Address</u>	<u>Common Stock</u>	
	<u>Number of Shares</u>	<u>Percent (%)</u>
<u>Directors and officers</u>		
Stephen F. Hiu 9110 Red Branch Road Columbia, MD 21045	14,993,633 ¹	12.07
Thomas L. Kempner 61 Broadway New York, NY 10006	147,804,528 ²	61.53
Michael G. Kimelman 100 Park Avenue New York, NY 10017	50,197,723 ³	31.52
Sidney R. Knafel 810 Seventh Avenue New York, NY 10019	145,777,554 ⁴	61.27
Patrick F. Monahan 9110 Red Branch Road Columbia, MD 21045	9,315,033 ⁵	7.92
Edward J. Weisberger 9110 Red Branch Road Columbia, MD 21045	4,570,000 ⁶	3.98
All Directors and Officers as a Group (6 persons)	372,658,471 ⁷	84.25
<u>Others</u>		
Joseph C. Abeles 220 E. 42 nd Street New York, NY 10017	17,954,407 ⁸	14.23
Fraydun Manocherian 3 New York Plaza New York, NY 10004	7,905,135 ⁹	7.13
Fermic Col. San Nicolas Tolentino Iztapalapa 09850 Mexico, D.F.	20,000,000 ¹⁰	18.13

1. Includes 1,148,633 shares held directly or indirectly by Dr. Hiu and 13,845,000 shares issuable upon exercise of options held by Dr. Hiu that are currently exercisable.

2. Includes 17,933,110 shares held directly or indirectly by Mr. Kempner and 536,920 shares issuable upon exercise of warrants held by Mr. Kempner that are currently exercisable. Also includes 43,800,135 shares issuable upon conversion of notes issued by the Company and held by Mr. Kempner. Also includes (i) 41,582,728 shares issuable upon exercise of warrants held by a trust under which Mr. Kempner is one of two trustees and the sole beneficiary, which are currently exercisable, (ii) 41,561,125 shares issuable upon exercise of warrants held by a trust under which Mr. Kempner is one of two trustees and one of his brothers is the sole beneficiary, which are currently exercisable, (iii) 2,079,411 shares issuable upon exercise of warrants held by trusts under which Mr. Kempner is one of two trustees and is a one-third beneficiary, that are currently exercisable, and (iv) 311,099 shares issuable upon exercise of warrants held by trusts under which Mr. Kempner is executor and is a one-third beneficiary, that are currently exercisable. Mr. Kempner shares voting and investment power with respect to the shares listed in (i)-(iv) above.
3. Includes 1,264,360 shares held directly or indirectly by Mr. Kimelman, and 14,000,000 shares issuable upon exercise of options that are currently exercisable. Also includes 17,680,341 shares issuable upon the conversion of notes issued by the Company, and 17,253,022 shares issuable upon exercise of warrants, all of which are held by Mr. Kimelman and are currently exercisable or convertible.
4. Includes 18,190,551 shares held directly or indirectly by Mr. Knafel, 42,619,509 shares issuable upon the conversion of notes issued by the Company and held by Mr. Knafel and 84,967,494 shares issuable upon the exercise of warrants directly or beneficially owned by Mr. Knafel that are currently exercisable.
5. Includes 2,047,533 shares held directly or indirectly by Mr. Monahan and 7,267,500 shares issuable upon the exercise of options held by Mr. Monahan that are currently exercisable.
6. Includes 70,000 shares held directly by Mr. Weisberger and 4,500,000 shares issuable upon exercise of options that are currently exercisable.
7. Includes 42,863,601 shares of common stock, 39,612,500 shares issuable upon exercise of options that are currently exercisable, 110,823,687 shares issuable upon the conversion of notes issued by the Company and 197,313,091 shares issuable upon the exercise of warrants that are currently exercisable.
8. Includes 2,128,294 shares held directly or indirectly by Mr. Abeles, 6,723,701 shares issuable upon the conversion of \$311,663 of long-term notes issued by the Company, and 9,102,412 shares issuable upon exercise of warrants held by Mr. Abeles that are currently exercisable.
9. Includes 7,375,935 shares of common stock owned directly or indirectly by Mr. Manocherian and 529,200 shares issuable upon the exercise of warrants owned directly or indirectly by Mr. Manocherian that are currently exercisable.
10. Includes 20,000,000 shares of common stock held directly by Fermic.

Compensation Committee Interlocks and Insider Participation

Thomas L. Kempner and Sidney R. Knafel are members of our compensation committee. Neither Mr. Kempner nor Mr. Knafel is, or has previously served as, one of our officers or employees. None of our executive officers serve, or has served as member of the board of directors or compensation committee of any other entity that has had one or more executive officers serving on our Board or compensation committee.

Certain Relationships and Transactions

In order to provide the Company with sufficient funds to settle the litigation with the holders of the convertible notes issued by the Company in 2001, on February 15, 2007, the Company issued and sold an aggregate principal amount of \$762,000 in 5% convertible debentures, \$381,000 to each of Thomas Kempner and Sidney Knafel, directors of the Company. These debentures are convertible into shares of the Company's common stock at \$.02 per share based on the offer made to the original debenture holders as the market price of the Company's common shares as of February 2007. As of September 1, 2008 these debentures have accrued \$58,240 of interest, and no payments have been made.

In order to provide the Company with working capital as the inventory received from the termination of the joint venture with Tate & Lyle PLC is sold and the receivables are collected, on December 12, 2007, the Company issued and sold an aggregate principal amount of \$300,000 in 8.5% secured notes, \$150,000 to each of Thomas Kempner and Sidney Knafel. These notes are secured by the accounts receivable of the Company. As of September 1, 2008 these notes have accrued \$10,850 of interest, and no payments have been made.

On October 15, 2007, Mr. Monahan, the Company's Vice-President, Secretary and Director of Manufacturing, was issued 1,000,000 shares of the Company's common stock, valued at \$21,000, in connection with his employment with, and services to, the Company. The shares of common stock were issued pursuant to the exemption from registration provided under Section 4(2) of the Securities Act of 1933, as amended.

As discussed in the section of this proxy statement titled "Proposal No. 2: Amendment to Articles of Incorporation Increasing Authorized Shares of Common Stock," the Company intends to commence an exchange offering to, among other things, reduce its current debt, if Proposal No. 2 is approved by the stockholders at the meeting. Michael Kimelman, Chairman of the Board, and Thomas Kempner and Sidney Knafel, directors of the Company, own in the aggregate \$3,815,337 principal amount of outstanding non-convertible notes issued by the Company. The Company expects that Messrs. Kimelman, Kempner and Knafel will exchange all of their outstanding non-convertible notes for shares of common stock if the Company commences the exchange offers. In addition, Messrs. Kimelman, Kempner and Knafel own an aggregate of \$4,897,474 of outstanding notes convertible into an additional 734,369,671 shares of our common stock. The Company expects that these convertible notes will be exchanged on the same terms as the proposed exchange offers. Directors of the Company own warrants and options to purchase 390,612,879 and 35,112,500 shares, respectively, of the Company's common stock. Officers of the Company own options to purchase 25,612,500 shares of the Company's common stock. The Company expects that the options and warrants held by the directors and officers will be exchanged for shares of common stock in the proposed exchange offers.

Section 16(a) Beneficial Ownership Reporting Compliance

Based solely on a review of the Section 16(a) reports filed with the Securities and Exchange Commission (the "SEC") and written representations provided to the Company by its officers and directors, and holders of more than ten percent of any class of the Company's registered securities, the Company believes that during fiscal year 2007, all filing requirements applicable to its reporting officers, directors and greater than ten percent beneficial owners were timely satisfied except one delinquent Form 4 filing by Thomas L. Kempner resulting in four transactions being untimely reported, and one delinquent Form 4 filing by Michael Kimelman resulting in four transactions being untimely reported.

Audit Fees and Services

The accounting firm of McElravy, Kinchen & Associates, P.C. ("McElravy") has been engaged to audit the financial statements of the Company for the fiscal year 2008. McElravy served as the Company's registered public accountants to audit the financial statements for 2007. J.H. Cohn LLP ("Cohn") originally served as the auditor in 2007 and served as the Company's registered public accountants to audit the restated financial statements in 2006. Berenson LLP originally served as the auditor in 2006; however, in May 2007, J.H. Cohn LLP acquired Berenson LLP in a transaction that was structured as an asset sale. Each of J.H. Cohn LLP and McElravy has advised the Company that neither the accounting firm nor any of its members or associates has any direct financial interest in or any connection with the Company other than as independent public auditors.

As of January 11, 2008, the Company dismissed Cohn as its independent registered public accounting firm as approved by the audit committee of the Board of Directors. The audit report issued by Cohn on the consolidated financial statements of the Company as of and for the years ended December 31, 2006 and 2005, included in the Company's amended Annual Report on Form 10-KSB/A filed on December 21, 2007, did not contain an adverse opinion or a disclaimer of opinion, and was not qualified or modified, as to uncertainty, audit scope or accounting principles, except as follows:

Cohn's report contains an explanatory paragraph. The paragraph states that the Company has suffered recurring losses from operations since inception and has a working capital deficiency that raises substantial doubt about its ability to continue as a going concern. The consolidated financial statements do not include any adjustments that might result from the outcome of that uncertainty.

During the years ended December 31, 2006 and 2005 and the interim period through January 11, 2008, the date of their dismissal, there have been no disagreements between the Company and Cohn on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of Cohn, would have caused Cohn to make reference to the subject matter thereof in its report on the Company's consolidated financial statements for such periods other than as described below.

There was a disagreement related to the Company's initial accounting for warrants issued in connection with certain debt that arose in connection with Cohn's review of the Company's Quarterly Report on Form 10-QSB for the quarterly period ended June 30, 2007. The accounting treatment was discussed with the audit committee of the Board of Directors and resolved to the satisfaction of Cohn. As a result, the Company restated the financial statements included in its Annual Report on Form 10-KSB for the year ended December 31, 2006, and the Form 10-QSB for the three months ended March 31, 2007. The Company has authorized Cohn to respond fully to the inquiries of McElravy, if any, concerning the matter.

During the years ended December 31, 2006 and 2005 and the interim period through January 11, 2008, Cohn did not advise the Company of any reportable event under Item 304(a)(1)(v) of Regulation S-K other than in connection with their audit of the Company's consolidated financial statements for the years ended December 31, 2006 and 2005, Cohn advised the Company's management and the audit committee of the Board of Directors that the Company did not have the internal controls necessary for the non-routine recording of warrants issued in connection with certain of the Company's debt obligations.

The Company appointed McElravy as its new independent registered public accounting firm effective as of January 15, 2008. The selection of McElravy was approved by the audit committee of the Board of Directors of the Company on January 15, 2008.

The following table shows the aggregate fees paid or accrued by the Company for the audit and other services provided by McElravy and J.H. Cohn LLP for fiscal year 2007, and by J. H. Cohn LLP for fiscal year 2006:

	FY 2007	FY 2006
	<hr/>	<hr/>
Audit Fees	\$ 33,000	\$ 100,844
Audit-Related Fees	0	0
Tax Fees	0	5,000
All Other Fees	0	0
	<hr/>	<hr/>
TOTAL	\$ 33,000	\$ 105,844

Audit services provided by McElravy and Cohn for fiscal year 2007, and by Cohn for fiscal year 2006 consisted of the audit of the consolidated financial statements and quarterly reviews of financial statements. "Tax Fees" include charges primarily related to tax return preparation and tax consulting services. In 2003, the SEC adopted a rule pursuant to the Sarbanes-Oxley Act of 2002 that, except with respect to certain *de minimis* services discussed below, requires audit committee pre-approval of audit and non-audit services provided by the Company's independent auditors. The audit committee reviews and pre-approves audit and non-audit services of the independent auditors in conformity with the requirements of Sarbanes-Oxley. All of the 2007 and 2006 services described above were pre-approved by the audit committee pursuant to this SEC rule. A representative of McElravy is expected to be available by phone at the meeting with the opportunity to make a statement if such representative so desires and to respond to appropriate questions.

PROPOSAL NO. 2: AMENDMENT TO ARTICLES OF INCORPORATION INCREASING AUTHORIZED SHARES OF COMMON STOCK.

The Company is proposing to amend Article Fifth of its Articles of Incorporation to increase the number of authorized shares of common stock, par value \$.01 per share, from 750,000,000 shares to 3,000,000,000 shares. Pursuant to Article Fifth of its Articles of Incorporation, the Company is presently authorized to issue 750,000,000 shares of common stock, of which on the record date 110,337,072 shares were issued and outstanding. Approximately 488,414,337 of the Company's unissued shares are reserved for issuance upon exercise of presently outstanding stock options, exercisable warrants and conversion of convertible securities. The Company is also presently authorized to issue 1,500,000 shares of Series A preferred stock, par value \$.01 per share, of which on the record date, 11,134 shares were issued and outstanding. The authorized number of shares of Series A preferred stock will not change as the result of the proposed amendment.

The Company is proposing (the "Proposal") to amend Article Fifth of its Articles of Incorporation in order to increase the authorized number of shares of common stock of the Company from 750,000,000 shares to 3,000,000,000 shares, par value \$.01 per share, as follows:

ARTICLE FIFTH

The total number of shares of stock of all classes which the Corporation has authority to issue is Three Billion, One Million Five Hundred Thousand (3,001,500,000) shares divided into Three Billion (3,000,000,000) shares par value of One Cent (\$.01) per share of Common Stock, having an aggregate par value of Three Hundred Million Dollars (\$300,000,000.00) and One Million Five Hundred Thousand (1,500,000) shares of the par value of One Cent (\$.01) per share of Preferred Stock having an aggregate par value of Fifteen Thousand Dollars (\$15,000.00). The aggregate par value of all shares of stock is Three Hundred Million Fifteen Thousand Dollars (\$300,015,000.00).

In order to reduce our stockholders' deficit, reduce our debt, improve our balance sheet ratios and simplify our capital structure, we are proposing to commence an exchange offer pursuant to which we will offer to exchange shares of our common stock for our outstanding notes due March 31, 2009, we are also proposing to exchange common stock for and our other outstanding convertible notes and warrants presently held by directors of our Company. Our directors own an aggregate of \$3,815,337 principal amount of non-convertible notes, \$4,897,474 principal amount of convertible notes. Directors of the Company own warrants and options to purchase 390,612,879 and 35,112,500 shares, respectively, of the Company's common stock. Officers of the Company own options to purchase 25,612,500 shares of the Company's common stock. The Company expects that these directors and officers will exchange all of their outstanding non-convertible notes, convertible notes, options and warrants for shares of common stock in the exchange offers. See the sections of this proxy statement titled "Security Ownership of Certain Beneficial Owners and Management" and "Certain Relationships and Transactions" for more information about the directors' security holdings and their interests in the proposed exchange offers.

We presently anticipate commencing the exchange offer after the date of this proxy statement, but before the scheduled date for the meeting; however, any such exchange offer will not be consummated until after the date of the meeting and will be contingent upon stockholder approval of the amendment of the Articles of Incorporation increasing the number of authorized shares. If stockholder approval is not obtained then we will not effectuate the exchange. Any exchange offer will only be made pursuant to documents or arrangements made with the holders of the securities to be exchanged.

This proxy statement shall not constitute an offer to sell or the solicitation of any offer to buy nor shall there be any sales of securities in any state in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any state.

This proposal also will enable the Company to have sufficient shares of common stock to be issued or reserved for issuance to provide flexibility with respect to future transactions, including financing requirements or other business transactions where the Company would have the option to use its common stock (or securities convertible into or exercisable for common stock) as consideration (instead of, or in addition to, cash) in connection with future growth, financing and other corporate purposes.

The Board of Directors of the Company has approved the adoption of the Proposal. The Board of Directors believes that it is in the best interests of the Company to amend Article Fifth of the Articles of Incorporation to give effect to the Proposal. In order to adopt the Proposal, the affirmative vote of holders of at least two-thirds of the outstanding voting power of the Company entitled to be cast at this meeting is required.

Stockholders of the Company will not have any preemptive rights with respect to the additional shares of common stock being authorized. No further approval by stockholders would be necessary prior to the issuance of any additional shares of common stock, except as may be required by law. The Board of Directors has sole discretion to issue additional shares of common stock for such consideration as may be determined by the Board of Directors. The issuance of any additional shares of common stock may have the effect of diluting the percentage of stock ownership of the present stockholders of the Company or could, under certain circumstances, be construed as an anti-takeover effect.

Directors of the Company who hold approximately 65% of the outstanding voting power of the Company have indicated that they intend to vote all their shares in favor of the proposal to amend the Articles of Incorporation of the Company.

**OUR BOARD OF DIRECTORS RECOMMENDS A VOTE “FOR” THE AMENDMENT TO THE
ARTICLES OF INCORPORATION.**

**PROPOSAL NO. 3:
AMENDMENT TO THE COMPANY’S 2001 STOCK INCENTIVE PLAN TO INCREASE THE NUMBER
OF SHARES AVAILABLE FROM 55,000,000 TO 300,000,000.**

The Company is proposing to amend and restate its 2001 Stock Incentive Plan (the “2001 Plan”) to increase the number of shares available under the 2001 Plan from 55,000,000 to 300,000,000 shares of common stock and to make certain other changes designed to reflect changes in regulatory requirements affecting the Plan and is seeking stockholder approval of such amendment. This amendment would also increase in the same proportion, from 5,500,000 to 30,000,000, the number of shares of common stock that may be allocated to the stock options or stock appreciation rights that are granted to any individual participant under the 2001 Plan who is an employee during any single taxable year. The affirmative vote of a majority of the votes cast on the proposal to amend the 2001 Plan is required for approval of the amendment. We have attached as Appendix I to this proxy statement the form of 2001 Plan as it would be amended and restated to reflect the new shares authorized for issuance assuming we receive the stockholder approval we are requesting.

The purpose of the 2001 Plan is to further the long term stability and financial success of the Company by attracting and retaining employees through the use of stock-based incentives, and to provide employees of the Company with additional incentive to promote the success of the Company. The following description of the material terms of the 2001 Plan is intended as a summary only and is qualified in its entirety by reference to the text of the 2001 Plan (reflecting the proposed amendment) attached as Appendix I.

Eligibility

All present and future employees of the Companyⁱ that the Board determines have contributed or who can be expected to contribute significantly to the Company will be eligible to receive incentive awards under the 2001 Plan. The approximate number of persons eligible to participate in the 2001 Plan is 13 as of August 27, 2008.

The Board has the power and complete discretion to select eligible employees to receive awards, and to determine the type, terms and conditions of the awards. The Board may delegate to the compensation committee, if any, the power to select which employees will receive awards, the type of awards, the time when awards are granted, the number of shares of common stock allocated to awards and the terms of awards, except to the extent that such a delegation would prevent compliance with applicable federal securities or tax laws, or other applicable laws or regulations. The Board may also delegate to the Executive Committee of the Company’s officers, or, if the Executive Committee ceases to exist, to the President of the Company, the authority to select eligible employees to receive stock options, to determine the time or times at which stock options will be awarded to eligible employees and to determine the terms and conditions of such stock options, subject to compliance with applicable law. Action taken by the Executive Committee or the President pursuant to such a delegation must be ratified by the Board.

Amount of Stock Available for Awards

The number of shares of the Company’s common stock available for incentive awards under the Company’s 1997 Stock Option Plan and 2001 Plan was 75,000,000, 10% of the total number of the Company’s common shares authorized, of which 55,000,000 are currently authorized under the 2001 Plan. The remaining 20,000,000 shares were authorized under the Company’s 1997 Stock Option Plan, which has now expired. The number of shares available under the 2001 Plan, the option exercise prices, the terms of incentive awards and the number of shares subject to outstanding options are proportionately adjusted by the Board for stock dividends, stock

splits, re-capitalization, mergers, combinations of shares and other changes affecting the Company's common stock. As of September 9, 2008, there were 40,525,000 shares of our common stock subject to outstanding options and restricted stock awards under the 2001 Plan. The Company proposes to increase the number of shares available under the 2001 Plan to 300,000,000 to maintain the 10% ratio to the total number of shares of common stock authorized to be issued by the Company. The Company's common stock is quoted on the OTC Bulletin Board. The last quoted price of the Company's common stock on September 5, 2008 was \$.013.

The actual amount of awards that will be granted under the 2001 Plan after its amendment and restatement will depend upon a number of factors, including the market value of the Company's common stock on future dates, the achievement of one or more performance goals by the employees and actual performance of the Company. Since these factors are not known at this time, the amount of awards paid under the 2001 Plan after its amendment and restatement, and the market value of such awards, are not yet determinable. In addition, because of these unknown variables, it is not possible to determine the benefits that might be received by recipients under the 2001 Plan after its amendment and restatement. The Summary Compensation Table on page 6 above shows the awards that were made in 2007 under the 2001 Plan (prior to its amendment and restatement proposed herein). No awards were made under the 2001 Plan in 2007 to non-executive directors.

Stock Options and Stock Appreciation Rights

The Board may grant stock options to eligible employees, and establish the terms and conditions for exercising each stock option. Stock options may be either incentive stock options (which are subject to favorable tax treatment under Section 422 of the Internal Revenue Code of 1986, as amended (the "Code")) or non-qualified stock options (which are not entitled to such treatment). Stock appreciation rights may be granted with respect to all or any part of a stock option, and also are subject to terms and conditions set by the Board. Stock appreciation rights may be granted in connection with a stock option or in a separate incentive award.

The exercise price of a stock option granted to an employee must be at least 100% of (i) the closing price of the Company's common stock on the date of determination if the stock is traded on a national securities exchange or quoted on the Nasdaq National Market, (ii) the average of the closing bid and asked prices per share for the Company's common stock on the date of determination if the stock is not listed on a national exchange or quoted on the Nasdaq National Market, or (iii) the value determined by the Board using the reasonable application of a reasonable valuation method if none of the above are applicable (the "Fair Market Value"). The exercise price of an incentive stock option must be at least 110% of Fair Market Value in the case of a grant to an employee who is a 10% stockholder of the Company. The Fair Market Value of incentive stock options that become exercisable by an employee for the first time in any calendar year is limited to \$100,000.

In order to exercise a stock option, an employee must provide the Company with written notice and pay the exercise price of the stock option in full in cash, unless the terms of the stock option agreement permit the employee to deliver mature shares (shares of common stock to which the employee has good title, free and clear of all liens, which the employee has either held for at least six months or purchased on the open market), valued at their Fair Market Value, in satisfaction of all or any part of the exercise price. Alternatively, an employee's stock option agreement may permit the employee to conduct a "broker-assisted" exercise. A broker-assisted exercise occurs when the employee delivers the exercise notice, together with irrevocable instructions to a broker to deliver to the Company, from the sale or loan proceeds with respect to the sale of common stock that is the subject of the stock option or from a loan secured by common stock that is the subject of the stock option, the amount necessary to pay the exercise price and, if required by the terms of the stock option, any applicable withholding taxes.

Stock options may be exercised in whole or in part at such times as may be specified in the employee's stock option agreement, subject to certain limitations with respect to incentive stock options. No incentive stock option may be exercised after the first to occur of (x) ten years from the Date of Grant (or five years if the employee is a 10% shareholder), (y) three months following the date of the employee's retirement or termination of employment with the Company for reasons other than disability or death, or (z) one year following the date of the employee's termination of employment on account of disability or death (or, if the employee dies after terminating employment while the option is still exercisable, one year following the date of the employee's death).

The Board may grant a stock appreciation right in connection with all or any part of a stock option or as a separate award. A stock appreciation right entitles the employee to receive an amount equal to the excess of (i) the Fair Market Value of the common stock covered by the stock appreciation right over (ii) the Fair Market Value of the common stock on the date of the stock appreciation right was granted. The stock appreciation right can be paid in stock or cash, or both.

Restricted Stock

The Board may also grant shares of common stock that are subject to certain terms and conditions. Employees who receive restricted stock may not sell or transfer the restricted stock until the restrictions have been met, and if the restrictions are not met, the restricted stock will be forfeited. Unless otherwise provided in the restricted stock agreement, a stockholder's agreement or any other agreement, a holder of restricted stock will have all the rights of a Company stockholder holding the same class or series of common stock, including the right to vote the shares and the right to receive dividends and distributions.

Federal Income Tax Consequences

The following is a brief and general summary of the federal income tax consequences of transactions under the 2001 Plan based on federal income tax laws in effect on January 1, 2008. The summary does not purport to be complete, and does not address the tax consequences of a participant's death or the state, local and foreign tax laws that may also be applicable to awards and transactions involving awards.

A participant generally will not incur federal income tax when he or she is granted a nonqualified stock option, an incentive stock option or a stock appreciation right. Upon exercise of a nonqualified stock option or a stock appreciation right, the participant will be treated in most circumstances as having received ordinary income equal to the difference between the fair market value of the common stock on the date of the exercise and the exercise price.

This income is subject to income tax withholding by the Company. When a participant exercises an incentive stock option, he or she generally will not recognize taxable income, unless the participant is subject to the alternative minimum tax, subject to satisfying applicable holding period requirements.

A participant will generally not incur federal income tax when he or she is granted restricted stock. When the restrictions imposed on the restricted stock lapse, the participant will be treated as having received ordinary income equal to the fair market value of the restricted stock on the date the restrictions lapsed. A participant may make a special election under the Code to be taxed on the fair market value of the restricted stock at the time the restricted stock is granted. If such an election is made, the participant generally will not be taxed when the restrictions on the restricted stock later lapse. Income recognized by a participant in connection with restricted stock is subject to income tax withholding by the Company.

The Company usually will be entitled to a business expense deduction at the time and in the amount that the recipient of an award recognizes ordinary income. As stated above, this usually occurs upon exercise of nonqualified stock options and stock appreciation rights, and upon the lapse of restrictions on restricted stock. No deduction is allowed in connection with an incentive stock option unless the employee disposes of the common stock received upon exercise in violation of certain holding period requirements. There may be circumstances when a deduction is not allowed for certain transfers of common stock or payments to participants upon the exercise of an award that has been accelerated as a result of a change of control. Also, Section 162(m) of the Code imposes a \$1,000,000 limit on the amount of the annual compensation deduction allowable to a publicly-held company with respect to its CEO and each of its other three most highly compensated officers (other than the CFO), and the Company will not be able to deduct the payment of compensation to any of these persons in excess of the \$1,000,000 annual limit unless it qualifies for an applicable exclusion.

The discussion above is subject to the general federal tax doctrines of constructive receipt and economic benefit and to the applicable provisions of Code Section 409A. If at any time the 2001 Plan, any incentive award under the 2001 Plan, or any arrangement required to be aggregated with the 2001 Plan or any incentive award under the 2001 Plan fails to comply with the applicable requirements of Code Section 409A, all amounts (including earnings) deferred under the 2001 Plan or the award for the taxable year and all preceding taxable years by any participant with respect to whom the failure relates are includible in that participant's gross income for the taxable year, to the extent the amounts are not subject to a substantial risk of forfeiture and have not previously been included in the participant's gross income. These amounts are also subject to an additional income tax equal to twenty percent of the amount required to be included in gross income and to interest equal to the underpayment rate specified by the Internal Revenue Service plus one percentage point, imposed on the underpayments that would have occurred had the compensation been included in income for the taxable year when first deferred, or if later, when no longer subject to a substantial risk of forfeiture.

Administration

The Board of Directors administers the 2001 Plan. The Board may, however, delegate the responsibility for administering the 2001 Plan to the compensation committee of the Board, provided the compensation committee consists solely of non-employee, outside directors, as defined in Section 162(m) of the Code and Rule 16b-3 of the Exchange Act of 1934, as amended (the "Exchange Act"). The 2001 Plan may be terminated, modified or amended by the stockholders of the Company. The Board of Directors may also terminate the 2001 Plan or modify or amend it in certain respects as set forth in the 2001 Plan.

Plan Amendment and Termination

The Board may amend or terminate the 2001 Plan in such respects as it shall deem advisable; however, if the Code so requires, no change may be made that increases the total number of shares of common stock reserved for issuance pursuant to incentive awards granted under the 2001 Plan (except in connection with a business combination, re-capitalization, stock dividend or combination and the like), materially modifies the requirements as to eligibility for participation in the 2001 Plan, or materially increases the benefits accruing to participants under the 2001 Plan, unless the change is authorized by the stockholders of the Company. The Board may, however, amend the 2001 Plan and unilaterally amend incentive awards under the 2001 Plan as it deems appropriate to ensure compliance with applicable federal or state securities laws or regulations, or any applicable NASDAQ or securities exchange listing requirement, or to cause incentive stock options issued under the 2001 Plan to meet the requirements of the Code and applicable regulations. Except as indicated in this paragraph, a termination or amendment of the 2001 Plan will not, without the consent of the participant, detrimentally affect the participant's rights under an incentive award previously granted to the participant. The 2001 Plan will terminate automatically on April 30, 2011.

OUR BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE AMENDMENT OF THE 2001 STOCK INCENTIVE PLAN.

Stockholder Proposals

Any stockholder desiring to present a proposal to the stockholders at the 2009 Annual Meeting of Stockholders and who desires that the proposal be included in the Company's proxy statement and proxy card relating to that meeting, must transmit the proposal to the Secretary of the Company so that it is received at the Company's principal executive offices no later than 5:00 p.m. local time on March 1, 2009. All proposals must comply with applicable SEC regulations. With respect to stockholder proposals that are not included in the proxy statement for the 2008 Annual Meeting of Stockholders, the persons named in the proxy solicited by the Company's board of directors for the 2008 Annual Meeting of Stockholders will be entitled to exercise discretionary voting power conferred by the proxy under circumstances specified in Exchange Act Rule 14a-4(c), including with respect to proposals received by the Company after August 10, 2008. It is suggested that the proposal be submitted by certified mail, return receipt requested, to our principal executive office at the following address: IGENE Biotechnology, Inc., 9110 Red Branch Road, Columbia, Maryland 21045, Attn: Corporate Secretary.

Deliver to Stockholders Sharing Address

We are providing a copy of our Annual Report on Form 10-KSB for the fiscal year ended December 31, 2007 and our Quarterly Report on Form 10-Q for the quarter ended June 30, 2008 simultaneously with delivery of this Proxy Statement. You may obtain additional copies of the proxy statement, Form 10-KSB and/or Form 10-Q filed with the SEC by writing to IGENE Biotechnology, Inc., 9110 Red Branch Road, Columbia, Maryland 21045, Attn: Corporate Secretary or by calling (410) 997-2599.

We are delivering only one proxy statement, Form 10-KSB and Form 10-Q to multiple stockholders sharing an address unless we have received contrary instructions from one or more of the stockholders. We will promptly deliver upon written or oral request a separate copy of this proxy statement, the Form 10-KSB or the Form 10-Q to a stockholder at a shared address to which a single copy was sent. If you are a stockholder residing at a shared address and would like to request an additional copy of the proxy statement, Form 10-KSB or Form 10-Q now or with respect to future mailings, or to request to receive only one copy of the proxy statement, Form 10-KSB or Form 10-Q if you are currently receiving multiple copies, please send your request to IGENE Biotechnology, Inc., 9110 Red Branch Road, Columbia, Maryland 21045, Attn: Corporate Secretary or call (410) 997-2599.

Other Business

At the date of this proxy statement, the only business that the board of directors intends to present or knows that others will present at the meeting is that hereinabove set forth. If any other matter or matters are properly brought before the meeting, or any adjournment thereof, it is the intention of the persons named in the accompanying form of proxy to vote the proxy on such matters in accordance with their judgment.

INCORPORATION BY REFERENCE

The SEC allows us to "incorporate by reference" information into this proxy statement. This means that we can disclose important information about us and our financial condition to you by referring you to another document filed separately with the SEC. The information incorporated by reference is considered to be part of this proxy statement. This proxy statement incorporates by reference the information listed below that we have previously filed with the SEC. We incorporate by reference Items 6, 7 and 8 from Part II of the Company's Annual Report on Form 10-KSB for the fiscal year ended December 31, 2007, and Items 1 and 2 from Part I of the Company's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2008 and any other items in that Quarterly Report expressly updating the above referenced items from our Annual Report on Form 10-KSB. You can read and obtain copies of the information incorporated into this proxy statement at the following SEC location:

Public Reference Room
100 F Street, N.E.
Washington, D.C. 20549

You may obtain information on the operation of the Public Reference Room by calling the SEC at (800) SEC-0330. The SEC also maintains a web site that contains reports, proxy statements, information statements and other information about issuers, like IGENE Biotechnology, Inc., who file electronically with the SEC. The address of that web site is www.sec.gov.

/S/ STEPHEN F. HIU

STEPHEN F. HIU
President and Chief Technical Officer

IGENE BIOTECHNOLOGY, INC.**AMENDED AND RESTATED 2001 STOCK INCENTIVE PLAN**

1. PURPOSE. The purpose of the Amended and Restated 2001 Stock Incentive Plan (the "Plan") is to further the long term stability and financial success of IGENE Biotechnology, Inc. and its subsidiaries (collectively the "Company") by attracting and retaining employees through the use of stock-based incentives, and to provide employees with an additional incentive to promote the success of the Company. It is believed that ownership of Company Common Stock will stimulate the efforts of those employees upon whose judgment and interests the Company is and will be largely dependent for the successful conduct of its business. It is also believed that Incentive Awards granted to employees under this Plan will strengthen their desire to remain employed with the Company and will further the identification of employees' interests with those of the Company. The Plan is intended to operate in compliance with the provisions of Securities and Exchange Commission Rule 16b-3.

2. DEFINITIONS. As used in the Plan, the following terms have the meanings indicated:

- (a) "ACT" means the Securities Exchange Act of 1934, as amended.
- (b) "APPLICABLE WITHHOLDING TAXES" means the aggregate amount of federal, state and local income and payroll taxes that the Company is required by applicable law to withhold in connection with any lapse of restrictions on Restricted Stock or any exercise of a Nonstatutory Stock Option or Stock Appreciation Right.
- (c) "BOARD" means the Board of Directors of IGENE Biotechnology, Inc.
- (d) "CHANGE OF CONTROL" means the occurrence of any of the following events:
 - (i) The acquisition by a Group of Beneficial Ownership of 50% or more of the Common Stock or the Voting Power of the Company, but excluding for this purpose: (A) any acquisition by the Company (or a Subsidiary of the Company), or an employee benefit plan of the Company; (B) any acquisition of Common Stock of the Company by management employees of the Company; (C) any acquisition by a member or members of the Board who own Common Stock as of the effective date specified in Section 11 (the "Existing Shareholders"); or (D) any trusts, partnerships or corporations controlled by the Existing Shareholders.
 - (ii) Individuals who constitute the Board on the date immediately after the effective date set forth in Section 11 (the "Incumbent Board") cease to constitute at least a majority of the Board, provided that any director whose nomination was approved by a majority of the Incumbent Board shall be considered a member of the Incumbent Board unless such individual's initial

assumption of office is in connection with an actual or threatened election contest (as such terms are used in Rule 14a-11 of Regulation 14A promulgated under the Act).

(iii) Approval by the shareholders of the Company of a reorganization, merger or consolidation, in each case, in which the owners of more than 50% of the Common Stock or Voting Power of the Company do not, following such reorganization, merger or consolidation, beneficially own, directly or indirectly, more than 50% of the Common Stock or Voting Power of the corporation resulting from such reorganization, merger or consolidation.

(iv) A complete liquidation or dissolution of the Company or a sale or other disposition of all or substantially all of the Company's assets.

- (e) "CODE" means the Internal Revenue Code of 1986, as amended.
- (f) "COMMITTEE" means the Compensation Committee of the Board, provided that each member of the Compensation Committee qualifies as an outside director for purposes of Code section 162(m), a non-employee director for purposes of Rule 16b-3 and an independent director for purposes of the listing standards of the NASDAQ or securities exchange on which the Common Stock may be listed.
- (g) "COMMON STOCK" means common stock of IGENE Biotechnology, Inc., par value \$.01 per share. In the event of a change in the capital structure of IGENE Biotechnology, Inc. (as provided in Section 13), the shares resulting from such a change shall be deemed to be Common Stock within the meaning of the Plan.
- (h) "COMPANY" means IGENE Biotechnology, Inc. and, as the context requires, its Subsidiaries.
- (i) "DATE OF GRANT" means (i) with respect to a Nonstatutory Stock Option, the date on which the Committee completes the corporate action necessary to create a legally binding right constituting the Nonstatutory Option; or (ii) with respect to an Incentive Stock Option, the date on which the Committee completes the corporate action constituting an offer of stock for sale to an employee under the terms and conditions of the Incentive Stock Option; and (iii) with respect to Restricted Stock, the date on which the Board grants the Incentive Award. With respect to an Incentive Award, the Committee may specify a future date on which the grant is to be granted or become effective.
- (j) "DISABILITY" or "DISABLED" means, as to an Incentive Stock Option, a disability within the meaning of Code section 22(e)(3). As to all other Incentive Awards, the Board shall determine whether a Disability exists and such determination shall be conclusive.
- (k) "FAIR MARKET VALUE" means, as of any date, the value of a share of Common Stock, determined as follows:

(i) if such Common Stock is then quoted on the NASDAQ National Market, its closing price on the NASDAQ National Market on the date of determination, as reported in The Wall Street Journal;

(ii) if such Common Stock is then listed on a national securities exchange, its closing price on the date of determination on the principal national securities exchange on which the Common Stock is listed or admitted to trading, as reported in The Wall Street Journal;

(iii) if such Common Stock is not quoted on the NASDAQ National Market nor listed or admitted to trading on a national securities exchange, the average of the closing bid and asked prices on the date of determination, as reported in The Wall Street Journal or by such other source as the Board may determine to be reliable;

(iv) if none of the foregoing is applicable, by the Board using the reasonable application of a reasonable valuation method.

- (l) "INCENTIVE AWARD" means, collectively, an award of Restricted Stock, an Option, or a Stock Appreciation Right granted under the Plan.
- (m) "INCENTIVE STOCK OPTION" means an Option intended to meet the requirements of, and qualify for favorable federal income tax treatment under, Code section 422.
- (n) "MATURE SHARES" means shares of Common Stock for which the holder thereof has good title, free and clear of all liens and encumbrances and which such holder either (i) has held for at least six months, or (ii) has purchased on the open market.
- (o) "NONSTATUTORY STOCK OPTION" means an Option that does not meet the requirements of Code section 422, or, even if meeting the requirements of Code section 422, is not intended to be an Incentive Stock Option and is so designated.
- (p) "OPTION" means a right to purchase Common Stock granted under the Plan, at a price determined in accordance with the Plan.
- (q) "PARTICIPANT" means any employee of the Company who receives an Incentive Award under the Plan.
- (r) "RESTRICTED STOCK" means Common Stock awarded upon the terms and subject to the restrictions set forth in Section 10.
- (s) "RULE 16B-3" means Rule 16b-3 of the Securities and Exchange Commission promulgated under the Act. A reference in the Plan to Rule 16b-3 shall include a reference to any corresponding rule (or number redesignation) of any amendments to Rule 16b-3 enacted after the effective date of the Plan's adoption.
- (t) "STOCK APPRECIATION RIGHT" means a right to receive amounts from the Company granted under Section 7.

- (u) "SUBSIDIARY" means (i) for purposes of determining eligibility to receive a Nonstatutory Stock Option, any corporation or other entity in a chain of corporations or other entities in which each corporation or other entity has a controlling interest (within the meaning of Treasury Regulations section 1.409A-1(b)(5)(E)(1)) in another corporation or other entity in the chain, beginning with the corporation or other entity in which the Company has a controlling interest; and (ii) for all other purposes, any corporation of which the Company owns at least 50 percent of the combined voting power of all classes of stock or which is in a chain of corporations with the Company in which stock possessing at least 50% of the combined voting power of all classes of stock is owned by one or more corporations in the chain.
- (v) "TAXABLE YEAR" means the fiscal period used by the Company for reporting taxes on income under the Code.

3. GENERAL. The following types of Incentive Awards may be granted under the Plan: Options (Incentive Stock Options or Nonstatutory Stock Options), Stock Appreciation Rights or Restricted Stock.

4. STOCK. Subject to Section 13 of the Plan, there shall be reserved for issuance under the Plan an aggregate of Three Hundred Million (300,000,000) shares of Common Stock, which shall be authorized, but unissued, shares. Shares allocable to Incentive Awards or portions thereof granted under the Plan that expire, are forfeited, or otherwise terminate unexercised may again be subjected to an Incentive Award under the Plan. The Board is expressly authorized to grant an Incentive Award to a Participant conditioned upon the surrender for cancellation of Incentive Awards previously granted to such Participant. No more than Thirty Million (30,000,000) shares of Common Stock may be allocated to the Options or Stock Appreciation Rights that are granted to any individual Participant who is an employee during any single Taxable Year. For purposes of determining the number of shares that are available for Incentive Awards under the Plan, such number shall include the number of shares under an Incentive Award surrendered by a Participant or retained by the Company in payment of Applicable Withholding Taxes. All the shares of Common Stock that may be issued under the Plan may be issued as Incentive Stock Options.

5. ELIGIBILITY.

- (a) All present and future employees of the Company whom the Board determines to have contributed or who can be expected to contribute significantly to the Company shall be eligible to receive Incentive Awards under the Plan. The Board shall have the power and complete discretion, as provided in Section 14, to select eligible employees to receive Incentive Awards, and to determine for each employee the terms and conditions, the nature of the award, and the number of shares to be allocated to each employee as part of each Incentive Award.
- (b) The grant of an Incentive Award shall not obligate the Board to pay an employee any particular amount of remuneration, to continue the employment of the employee after the grant or to make further grants to the employee at any time thereafter.

6. OPTIONS.

- (a) The Board may make grants of Options to eligible employees hereunder. Whenever the Board deems it appropriate to grant Options, written notice shall be given to the Participant stating the number of shares for which Options are granted, the Option price per share, whether the Options are Incentive Stock Options or Nonstatutory Stock Options, the extent to which Stock Appreciation Rights are granted (as provided in Section 7), and the conditions to which the grant and exercise of the Options are subject. This notice, when duly accepted in writing by the Participant, shall become a stock option agreement. The Board may delegate to the Executive Committee of the Company's officers the authority to select eligible employees to receive Options, to determine the time or times at which Options will be awarded to eligible employees and to determine the terms and conditions of such Options, except to the extent that such a delegation would prevent compliance with Rule 16b-3, Code section 162(m) or any other section of the Code, or other applicable law or regulation. Actions taken by the Executive Committee of the Company's officers pursuant to such a delegation of authority shall be subject to ratification by the Board. In the event that the Executive Committee ceases to exist, the delegation described above may be made to the President of the Company.
- (b) The exercise price of shares of Common Stock covered by an Option shall be not less than 100% of the Fair Market Value of such Common Stock on the Date of Grant (or 110% of Fair Market Value in the case of a grant of an Incentive Stock Option to a 10% shareholder (as that term is defined in Code section 422)).
- (c) Options may be exercised in whole or in part at such times as may be specified by the Board in the Participant's stock option agreement; provided that, the exercise provisions for Incentive Stock Options shall in all events not be more liberal than the following provisions:
 - (i) No Incentive Stock Option may be exercised after the first to occur of (x) ten years from the Date of Grant (or five years from the Date of Grant in the case of a grant of an Incentive Stock Option to a 10% shareholder (as that term is defined in Code section 422)), (y) three months following the date of the Participant's retirement or termination of employment with the Company and all its Subsidiaries for reasons other than Disability or death, or (z) one year following the date of the Participant's termination of employment on account of Disability or death (or, if the Participant dies following termination of employment during the time when the Incentive Stock Option is otherwise exercisable, one year from the date of death).
 - (ii) An Incentive Stock Option by its terms, shall be exercisable in any calendar year only to the extent that the aggregate Fair Market Value (determined at the Date of Grant) of the Common Stock with respect to which Incentive Stock Options are exercisable for the first time during the calendar year does not exceed \$100,000 (the "Limitation Amount"). Incentive Stock Options granted under the Plan and all other plans of the Company shall be aggregated for purposes of determining whether the Limitation Amount has been exceeded. The Board may

impose such conditions as it deems appropriate on an Incentive Stock Option to ensure that the foregoing requirement is met. If Incentive Stock Options that first become exercisable in a calendar year exceed the Limitation Amount, the excess Options will be treated as Nonstatutory Stock Options to the extent permitted by law.

- (d) The Board may impose such vesting conditions and other requirements as the Board deems appropriate, and the Board may include such provisions regarding Change of Control as the Board deems appropriate.

7. STOCK APPRECIATION RIGHTS.

- (a) Whenever the Board deems it appropriate, Stock Appreciation Rights may be granted to an eligible employee. Stock Appreciation Rights may be granted in connection with all or any part of an Option or in a separate Incentive Award.

- (b) The following provisions apply to all Stock Appreciation Rights that are granted in connection with Options:

- (i) Stock Appreciation Rights shall entitle the Participant, upon exercise of all or any part of the Stock Appreciation Rights, to surrender to the Company unexercised that portion of the underlying Option relating to the same number of shares of Common Stock as is covered by the Stock Appreciation Rights (or the portion of the Stock Appreciation Rights so exercised) and to receive in exchange from the Company an amount equal to the excess of (x) the Fair Market Value on the date of exercise of the Common Stock covered by the surrendered portion of the underlying Option, over (y) the exercise price of the Common Stock covered by the surrendered portion of the underlying Option. The Board may limit the amount that the Participant will be entitled to receive upon exercise of Stock Appreciation Rights.

- (ii) Upon the exercise of a Stock Appreciation Right and surrender of the related portion of the underlying Option, the Option, to the extent surrendered, shall not thereafter be exercisable.

- (iii) Subject to any further conditions upon exercise imposed by the Board, a Stock Appreciation Right shall be exercisable only to the extent that the related Option is exercisable and a Stock Appreciation Right shall expire no later than the date on which the related Option expires.

- (iv) A Stock Appreciation Right may only be exercised at a time when the Fair Market Value of the Common Stock covered by the Stock Appreciation Right exceeds the exercise price of the Common Stock covered by the underlying Option.

- (c) The following provisions apply to all Stock Appreciation Rights that are not granted in connection with Options:

(i) Stock Appreciation Rights shall entitle the Participant, upon exercise of all or any part of the Stock Appreciation Rights, to receive in exchange from the Company an amount equal to the excess of (x) the Fair Market Value on the date of exercise of the Common Stock covered by the surrendered Stock Appreciation Right, over (y) the Fair Market Value of the Common Stock on the Date of Grant of the Stock Appreciation Right. The Board may limit the amount that the Participant will be entitled to receive upon exercise of Stock Appreciation Rights.

(ii) A Stock Appreciation Right may only be exercised at a time when the Fair Market Value of the Common Stock covered by the Stock Appreciation Right exceeds the Fair Market Value of the Common Stock on the Date of Grant of the Stock Appreciation Right.

- (d) The manner in which the Company's obligation arising upon the exercise of a Stock Appreciation Right shall be paid shall be determined by the Board and shall be set forth in the Incentive Award. The Incentive Award may provide for payment in Common Stock or cash, or a fixed combination of Common Stock or cash, or the Board may reserve the right to determine the manner of payment at the time the Stock Appreciation Right is exercised. Shares of Common Stock issued upon the exercise of a Stock Appreciation Right shall be valued at their Fair Market Value on the date of exercise.
- (e) Stock Appreciation Rights shall be evidenced by a written agreement in such form as the Board shall from time to time approve and as shall be consistent with the terms of the Plan.

8. METHOD OF EXERCISE OF OPTIONS AND STOCK APPRECIATION RIGHTS.

- (a) Options and Stock Appreciation Rights may be exercised by the Participant giving written notice of the exercise to the Company, stating the number of shares the Participant has elected to purchase under the Option or the number of Stock Appreciation Rights the Participant has elected to exercise. In the case of the purchase of shares under an Option, such notice shall be effective only if accompanied by the exercise price in full in cash; provided, however, that if the terms of an Option so permit, the Participant may (i) deliver Mature Shares (valued at their Fair Market Value) in satisfaction of all or any part of the exercise price, or (ii) deliver a properly executed exercise notice together with irrevocable instructions to a broker to deliver promptly to the Company, from the sale or loan proceeds with respect to the sale of Common Stock or a loan secured by Common Stock, the amount necessary to pay the exercise price and, if required by the terms of the Option, Applicable Withholding Taxes.
- (b) The Company may place on any certificate representing Common Stock issued upon the exercise of an Option or a Stock Appreciation Right any legend deemed desirable by the Company's counsel to comply with federal or state securities laws, and the Company may require a customary written indication of the Participant's investment intent. Until the

Participant has made any required payment, including any Applicable Withholding Taxes, and has had issued a certificate for the shares of Common Stock acquired, he or she shall possess no shareholder rights with respect to the shares.

- (c) Each Participant shall agree as a condition of the exercise of an Option or a Stock Appreciation Right to pay to the Company, or make arrangements satisfactory to the Company regarding the payment to the Company of, Applicable Withholding Taxes. Until such amount has been paid or arrangements satisfactory to the Company have been made, no stock certificate shall be issued upon the exercise of an Option or cash paid upon the exercise of a Stock Appreciation Right.
- (d) As an alternative to making a cash payment to the Company to satisfy Applicable Withholding Taxes, if the Participant's Option agreement so provides, the Participant may elect to (i) deliver Mature Shares (valued at their Fair Market Value) or (ii) to have the Company retain that number of shares of Common Stock (valued at their Fair Market Value) that would satisfy all or a specified portion of the Applicable Withholding Taxes.

9. TRANSFERABILITY OF OPTIONS AND STOCK APPRECIATION RIGHTS.

Nonstatutory Stock Options and Stock Appreciation Rights may be transferable by a Participant and exercisable by a person other than the Participant, but only to the extent specifically provided in the Incentive Award agreement. Incentive Stock Options, by their terms, shall not be transferable except by will or by the laws of descent and distribution and shall be exercisable, during the Participant's lifetime, only by the Participant.

10. RESTRICTED STOCK AWARDS.

- (a) The Board may make grants of Restricted Stock to eligible employees. Whenever the Board deems it appropriate to grant Restricted Stock, written notice shall be given to the Participant stating the number of shares of Restricted Stock granted and the terms and conditions to which the Restricted Stock is subject. This notice, when accepted in writing by the Participant shall become a grant agreement between the Company and the Participant. Restricted Stock may be awarded by the Board in its discretion without cash consideration.
- (b) No shares of Restricted Stock may be sold, assigned, transferred, pledged, hypothecated, or otherwise encumbered or disposed of until the restrictions on such shares as set forth in the Participant's grant agreement have lapsed or been removed pursuant to paragraph (d) or (e) below.
- (c) Upon the acceptance by a Participant of an award of Restricted Stock, such Participant shall, subject to the restrictions set forth in paragraph (b) above, have all the rights of a shareholder with respect to such shares of Restricted Stock, including, but not limited to, the right to vote such shares of Restricted Stock and the right to receive all dividends and other distributions paid thereon. Certificates representing Restricted Stock shall be issued to the Participant but shall bear a legend referring to the restrictions set forth in the Plan and the Participant's award agreement.

- (d) The Board shall establish as to each award of Restricted Stock the terms and conditions upon which the restrictions set forth in paragraph (b) above shall lapse. The terms and conditions may include, without limitation, the lapsing of such restrictions as a result of the Disability, death or retirement of the Participant or the occurrence of a Change of Control.
- (e) Notwithstanding the provisions of paragraph (b) above, the Board may at any time, in its sole discretion, accelerate the time at which any or all restrictions will lapse or remove any and all such restrictions.
- (f) Each Participant shall agree at the time the Restricted Stock is granted, and as a condition thereof, to pay to the Company, or make arrangements satisfactory to the Company regarding the payment to the Company of, Applicable Withholding Taxes. Until such amount has been paid or arrangements satisfactory to the Employer have been made, no stock certificate free of a legend reflecting the restrictions set forth in paragraph (b) above shall be issued to such Participant. As an alternative to making a cash payment to the Company to satisfy Applicable Withholding Taxes, if the grant so provides, the Participant may elect to (i) to deliver Mature Shares (valued at their Fair Market Value) or (ii) to have the Company retain that number of shares of Common Stock (valued at their Fair Market Value) that would satisfy all or a specified portion of the Applicable Withholding Taxes.

11. EFFECTIVE DATE OF THE PLAN. The original effective date of the Plan was April 30, 2001. The effective date of the Plan (as amended and restated herein) is September 12, 2008 (the "Amended and Restated Effective Date"). The Plan (as amended and restated herein) shall be submitted to the shareholders of the Company for approval. Until (i) the Plan (as amended and restated herein) has been approved by Company's shareholders, and (ii) the requirements of any applicable Federal or State securities laws have been met, no Option or Stock Appreciation Right granted under the Plan on or after the Amended and Restated Effective Date shall be exercisable.

12. TERMINATION, MODIFICATION, CHANGE

- (a) If not sooner terminated by the Board, this Plan shall terminate at the close of business on April 30, 2011. No Options or Restricted Stock shall be granted under the Plan after its termination. The Board may amend or terminate the Plan in such respects as it shall deem advisable; provided that, if and to the extent required by the Code, no change shall be made that increases the total number of shares of Common Stock reserved for issuance pursuant to Incentive Awards granted under the Plan (except pursuant to Section 13), materially modifies the requirements as to eligibility for participation in the Plan, or materially increases the benefits accruing to Participants under the Plan, unless such change is authorized by the shareholders of the Company. Notwithstanding the foregoing, the Board may amend the Plan and unilaterally amend Incentive Awards as it deems appropriate to ensure compliance with applicable federal or state securities laws or regulations thereunder, or any applicable NASDAQ or securities exchange listing requirement, and to cause Incentive Stock Options to meet the requirements of the Code and regulations thereunder. Except as provided in the preceding sentence, a termination

or amendment of the Plan shall not, without the consent of the Participant, detrimentally affect a Participant's rights under an Incentive Award previously granted to the Participant.

- (b) Notwithstanding the provisions of subsection (a) above, this subsection (b) will apply if the Company is involved in any merger or similar transaction that the Company intends to treat as a "pooling of interest" for financial reporting purposes. In such a case, the Board may amend the terms of any Incentive Award or of the Plan to the extent that the Company's independent accountants determine that such terms would preclude the use of "pooling of interest" accounting. The authority of the Board to amend the terms of any Incentive Award or of the Plan includes, without limitation, the right (i) to rescind or suspend any terms that are contingent on a Change in Control, such as the acceleration of vesting or provisions for special payments to an optionee or participant; (ii) to modify Incentive Awards to comply with prior practices of the Company as to terms of Incentive Awards; (iii) to provide for payment to the Participant of Common Stock or stock of the other party to the transaction equal to the fair value of the Incentive Award; and (iv) to suspend any provisions for payment of an Incentive Award in cash. The authority of the Board under this section may be exercised in the Board's sole and complete discretion.
- (c) No modification (within the meaning of Section 424(h)(3) of the Code) shall be made with respect to any Incentive Stock Option without the Participant's consent. No modification (within the meaning of Section 1.409A-1(b)(5)(v)(B) of the Treasury Regulations) shall be made with respect to any Nonstatutory Option or Stock Appreciation Right if such modification would result in the Option constituting a deferral of compensation, and no extension (within the meaning of Section 1.409A-1(b)(5)(v)(C) of the Treasury Regulations) shall be made with respect to any Nonstatutory Stock Option if such extension would result in the Option having an additional deferral feature from the Date of Grant, in each case without the Participant's consent.

13. CHANGE IN CAPITAL STRUCTURE.

- (a) In the event of a stock dividend, stock split or combination of shares, recapitalization or merger in which the Company is the surviving corporation or other change in the Company's capital stock (including, but not limited to, the creation or issuance to shareholders generally of rights, options or warrants for the purchase of common stock or preferred stock of the Company), the number and kind of shares of stock or securities of the Company to be subject to the Plan and to Incentive Awards then outstanding or to be granted thereunder, the maximum number of shares or securities which may be delivered under the Plan, the maximum number of shares or securities that can be granted to an individual Participant under Section 4, the exercise price, the terms of Incentive Awards and other relevant provisions shall be proportionately adjusted by the Board, whose determination shall be binding on all persons. If the adjustment would produce fractional shares or fractional cents with respect to any unexercised Option or its exercise price, the Board shall decrease the number of shares covered by the Option so as to eliminate the fractional shares and shall increase the fractional cent so as to eliminate the fractional cent.

- (b) If the Company is a party to a consolidation or a merger in which the Company is not the surviving corporation, a transaction that results in the acquisition of substantially all of the Company's outstanding stock by a single person or entity, or a sale or transfer of substantially all of the Company's assets, the Board may take such actions with respect to outstanding Incentive Awards as the Board deems appropriate.
- (c) Notwithstanding anything in the Plan to the contrary, the Board may take the foregoing actions without the consent of any Participant, and the Board's determination shall be conclusive and binding on all persons for all purposes.

14. ADMINISTRATION OF THE PLAN.

- (a) Subject to the provisions of Section 16(b) of the Act and Rule 16b-3, the Plan shall be administered by the Board. The Board shall have general authority to impose any limitation or condition upon an Incentive Award that the Board deems appropriate to achieve the objectives of the Incentive Award and the Plan and, without limitation and in addition to powers set forth elsewhere in the Plan, shall have the power and complete discretion to determine: (i) which eligible employees shall receive Incentive Awards and the nature of each Incentive Award, (ii) whether all or any part of an Incentive Award shall be accelerated upon a Change of Control, (iii) the number of shares of Common Stock to be covered by each Incentive Award, (iv) whether Options shall be Incentive Stock Options or Nonstatutory Stock Options, (v) when, whether and to what extent Stock Appreciation Rights shall be granted, (vi) the time or times when an Incentive Award shall be granted, (vii) whether an Incentive Award shall become vested over a period of time and when it shall be fully vested, (viii) when Options and Stock Appreciation Rights may be exercised, (ix) whether a Disability exists and whether a Participant that cannot be located shall be treated as having died, (x) the manner in which payment will be made upon the exercise of Options or Stock Appreciation Rights, (xi) conditions relating to the length of time before disposition of Common Stock received upon the exercise of Options or Stock Appreciation Rights is permitted, (xii) whether to authorize a Participant (A) to deliver Mature Shares to satisfy Applicable Withholding Taxes or (B) to have the Company withhold from the shares to be issued upon the exercise of a Nonstatutory Stock Option or Stock Appreciation Right the number of shares necessary to satisfy Applicable Withholding Taxes, (xiii) the terms and conditions applicable to Restricted Stock awards, (xiv) the terms and conditions on which restrictions upon Restricted Stock shall lapse, (xv) whether to accelerate the time at which any or all restrictions with respect to Restricted Stock will lapse or be removed, (xvi) notice provisions relating to the sale of Common Stock acquired under the Plan, (xvii) the extent to which information shall be provided to Participants about available tax elections, (xviii) when Incentive Awards may be forfeited or expire, and (xix) any additional requirements relating to Incentive Awards that the Board deems appropriate. Notwithstanding the foregoing, no "tandem stock options" (where two stock options are issued together and the exercise of one option affects the right to exercise the other option) may be issued in connection with Incentive Stock Options. The Board shall have the power to amend the terms of previously granted Incentive Awards that were granted by the Board so long as the terms as amended are consistent with the terms of the Plan and provided that the consent of the Participant is obtained with respect to any

amendment that would be detrimental to him or her, except that such consent will not be required if such amendment is for the purpose of complying with Rule 16b-3 or any requirement of the Code applicable to the Incentive Award.

- (b) The Board may adopt rules and regulations for carrying out the Plan with respect to Participants. The interpretation and construction of any provision of the Plan by the Board shall be final and conclusive as to any Participant. The Board may consult with counsel, who may be counsel to the Company, and shall not incur any liability for any action taken in good faith in reliance upon the advice of counsel.
- (c) A majority of the members of the Board shall constitute a quorum, and all actions of the Board shall be taken by a majority of the members present. Any action may be taken by a written instrument signed by all of the members, and any action so taken shall be fully effective as if it had been taken at a meeting.
- (d) Subject to the provisions of Section 16(b) of the Act and Rule 16b-3 and the Maryland General Corporation Law, the Board may delegate its rights, duties and other responsibilities hereunder to the Committee, in which case a majority of the members of the Committee shall constitute a quorum, and all actions of the Committee shall be taken by a majority of the members present. Any action by the Committee may be taken by a written instrument signed by all of the members, and any action so taken shall be fully effective as if it had been taken at a meeting. The Board from time to time may appoint members previously appointed and may fill vacancies, however caused, in the Committee. The Committee shall have, in connection with the administration of the Plan, the powers possessed by the Board, including the power to delegate to a subcommittee any of the administrative powers the Committee is authorized to exercise, subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board.

15. NOTICE. All notices and other communications required or permitted to be given under this Plan shall be in writing and shall be deemed to have been duly given if delivered personally or mailed first class, postage prepaid, as follows (a) if to the Company - at the principal business address of the Company to the attention of the President of the Company; and (b) if to any Participant - at the last address of the Participant known to the sender at the time the notice or other communication is sent.

16. SHAREHOLDER RIGHTS. No Participant shall be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Common Stock subject to an Option unless and until such Participant has exercised the Option and satisfied all requirements under the terms of the Option. A Participant holding shares of Restricted Stock shall be a shareholder of the Company with respect to such shares for all purposes, including dividend and voting rights, subject to the terms of the Restricted Stock award.

17. NO EMPLOYMENT OR OTHER SERVICE RIGHTS. Nothing in the Plan or any instrument executed or Incentive Award granted under the Plan shall confer upon any Participant any right to continue to serve the Company in the capacity in effect at the time the

Incentive Award was granted or shall affect the right of the Company to terminate the employment of an employee with or without notice and with or without cause.

18. INTERPRETATION. The terms of this Plan shall be governed by the laws of the State of Maryland, without regard to the conflict of law provisions of any jurisdiction. The terms of this Plan are subject to all present and future regulations and rulings of the Secretary of the Treasury or his delegate relating to the qualification of Incentive Stock Options under the Code. If any provision of the Plan conflicts with any such regulation or ruling, then that provision of the Plan shall be void and of no effect.

19. SECURITIES LAW COMPLIANCE. If at any time counsel to the Company shall be of the opinion that any sale or delivery of Common Stock pursuant to an Incentive Award is or may be in the circumstances unlawful or result in the imposition of excise taxes on the Company or any Subsidiary under the statutes, rules or regulations of any applicable jurisdiction, the Company shall have no obligation to make such sale or delivery, or to make any application or to effect or to maintain any qualification or registration under the Federal securities laws or otherwise with respect to Common Stock, and the right to exercise any Option shall be suspended until, in the opinion of such counsel, such sale or delivery shall be lawful or will not result in the imposition of excise taxes on the Company or any Subsidiary. Upon termination of any period of suspension under this Section 19, any Option affected by such suspension which shall not then have expired or terminated shall be reinstated as to all shares available before such suspension and as to the shares which would otherwise have become available during the period of such suspension, but no suspension shall extend the term of any Option.

**IGENE BIOTECHNOLOGY, INC.
AUDIT COMMITTEE CHARTER**

1. **PURPOSE.** The primary function of the Audit Committee (the "Committee") of Igene Biotechnology, Inc. (the "Company") is to monitor management's and the independent auditor's participation in the financial reporting process and to otherwise review and evaluate the audit efforts and independence of the independent accountants.
2. **COMPOSITION.**
 - A. The Committee shall be comprised of three or more independent directors as determined by the Company's Board of Directors (the "Board").
 - B. Each member of the Committee shall be, in the opinion of the Board, financially literate, and at least one member must have accounting or related financial management expertise. No member of the Committee shall have any relationship to the Company that might interfere with such member's independence from the Company and its management. In addition, the following restrictions shall apply to every member of the Committee:
 - (i) No individual who is either an employee or executive officer of the Company or any of its affiliates (or an immediate family member of an employee or executive officer of the Company) may serve on the Committee until at least three (3) years following the termination of such person's employment; and
 - (ii) No individual who either is a partner, controlling shareholder, or executive officer of an organization that has a business relationship with the Company or who has a direct business relationship with the Company may serve on the Committee unless the Board determines that the relationship does not interfere with the exercise of such member's independent judgment; provided, however, that the Board need not make such determination if at least three (3) years have elapsed since the termination of such disqualifying relationship; and
 - (iii) No individual may serve on the Committee if such person is employed as an executive of another corporation whose compensation committee includes any of the executive officers of the Company.
 - C. The members of the Committee shall be subject to such further or different restrictions and requirements for qualification as may be required from time to time by the Securities and Exchange Commission and any stock exchange which lists the Company's securities.

- D. The members of the Committee shall be elected by the Board at the annual meeting of the Board or until their successors shall be duly elected and qualified. Term of membership of the Committee is at the discretion of the Board, but maintenance of continuity while bringing a fresh perspective is to be considered. Unless a Chair is elected by the full Board, the members of the Committee may designate a Chair by majority vote of the full membership.
- 3. MEETINGS. The Committee shall meet at least twice annually, or more frequently as circumstances dictate.
- 4. RESPONSIBILITIES AND DUTIES. To fulfill its responsibilities and duties the Committee shall:
 - A. Documents/Report Review
 - (i) Review and update this Charter periodically, at least annually, as conditions dictate.
 - (ii) Cause the Company's independent accountants to review, prior to filing, any interim financial statements of the Company to be included in its quarterly reports on Form 10-Q.
 - (iii) Discuss with management any significant issues raised by the independent accountants with respect to the quality of the Company's accounting principles and financial reporting processes.
 - (iv) Prepare and submit an audit committee report to be set forth in the Company's proxy statement which sets forth whether:
 - (a) the Committee has reviewed and discussed the Company's audited financial statements with management;
 - (b) the Committee has discussed with its independent accountants the matters required to be discussed by SAS 61; and
 - (c) the Committee has received written disclosures and a letter from its independent accountants required by ISB Standard No. 1 and has discussed with its accountants the accountants' independence; and
 - (d) the Committee's recommendation to the Company's Board that the audited financial statements be included in the Company's annual report on Form 10-K.
 - (v) Cause the Company to disclose in its proxy statement whether the Committee members are independent, the standard used in making such

determination, and disclosure of information regarding any member of the Committee who is not independent.

B. Independent Accountants.

- (i) Have the authority and responsibility with the Board for the selection and evaluation of the Company's independent accountants and the selection and appointment of their successors. The Company's independent accountants ultimately shall be accountable to the Committee and the Board.
- (ii) Recommend to the Board the selection of the independent accountants. The Committee shall require the Company's independent accountants to prepare and submit to the Committee on a periodic basis a formal written statement delineating all relationships or services between said independent accountants and the Company. The Committee shall review and discuss all relationships disclosed by the Company's independent accountants which may impact upon their objectivity and independence and shall be responsible for recommending to the Company's Board any appropriate action to ensure the independence of such accountants.
- (iii) Review the performance of the independent accountants and approve any proposed discharge of the independent accountants when circumstances warrant.

C. Ethical and Legal Compliance.

- (i) Perform any other activities consistent with this Charter, the Company's Bylaws and governing law as the Committee or the Board deem necessary or appropriate.
- (ii) Cause the Company to provide each exchange on which any of the Company's securities are listed, if any, on at least an annual basis and with respect to any changes to the composition of the Committee, with written confirmation regarding:
 - (a) any determination made by the Company's Board concerning the independence of its auditors;
 - (b) the financial literacy of the Committee members;
 - (c) the determination that at least one member of the Committee has accounting or related financial management expertise; and

- (d) the annual review and reassessment of the adequacy of this Charter;
- (iii) Cause the Company to disclose in its proxy statements whether the Committee has adopted and the Board has approved a written charter for the Committee and, if applicable, include a copy of such charter as an appendix to the company's proxy statement at least once every three years.

The foregoing Charter of the Audit Committee of the Board of Directors of Igene Biotechnology, Inc., a Maryland corporation, was adopted by the Audit Committee on the 1st day of February, 2001, and approved by the Board of Directors of said corporation on the 1st day of February, 2001.

Igene Biotechnology, Inc.

By: /S/ MICHAEL G. KIMELMAN

MICHAEL G. KIMELMAN
Secretary

FORM OF PROXY

IGENE BIOTECHNOLOGY, INC.

2008 Annual Meeting of Stockholders – November 3, 2008

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

The undersigned stockholder of IGENE BIOTECHNOLOGY, INC., a Maryland corporation, hereby appoints Stephen F. Hiu, Michael G. Kimelman and Thomas L. Kempner, and each of them the proxies of the undersigned with full power of substitution to vote at the 2008 Annual Meeting of Stockholders of the Company to be held at 10:00 a.m. on November 3, 2008, and at any adjournment or adjournments thereof (the “Meeting”), with all the power which the undersigned would have if personally present, hereby revoking any proxy heretofore given. The undersigned hereby acknowledges receipt of the proxy statement for the Meeting and instructs the proxies to vote as directed on the reverse side.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE “FOR” ALL PROPOSALS.

CONTINUED AND TO BE SIGNED ON REVERSE SIDE--SEE REVERSE SIDE. THIS PROXY, WHEN PROPERLY SIGNED, WILL BE VOTED IN THE MANNER DIRECTED. IF NO SPECIFICATION IS MADE, THIS PROXY WILL BE VOTED “FOR” ALL PROPOSALS, AND IN THE DISCRETION OF THE PROXY HOLDERS AS TO ANY OTHER MATTERS WHICH MAY PROPERLY COME BEFORE THE MEETING.

(To Be Signed on Reverse Side)

X Please mark your votes as in this example.

1. Election of Directors

FOR
all nominees listed below

WITHHOLD AUTHORITY
to vote for all nominees listed below

Nominees: Stephen F. Hiu, Thomas L. Kempner, Michael G. Kimelman, Sidney R. Knafel,
Patrick F. Monahan

(Instruction: To withhold authority to vote for any individual nominee, write that nominee’s name below)

2. To authorize and approve an amendment to the Articles of Incorporation of the Company to increase the number of authorized shares of common stock from 750,000,000 to 3,000,000,000 shares.

FOR

AGAINST

ABSTAIN

3. To authorize and amend the Company’s 2001 Stock Incentive Plan to increase the number of shares available under the Plan from 55,000,000 to 300,000,000.

FOR

WITHHOLD

ABSTAIN

4. To transact such other business as may properly come before the meeting, or any adjournment thereof.

PLEASE RETURN THE PROXY CARD PROMPTLY USING THE ENCLOSED ENVELOPE.

Signature: _____ Date: _____

Signature: _____ Date: _____
(SIGNATURE IF HELD JOINTLY)

Note: Please sign exactly as name appears on stock certificate. When shares are held by joint tenants both should sign. When signing as attorney, executor, administrator, trustee or guardian, please give full title as such. If a corporation, please sign in full corporate name by President or other authorized officer. If a partner, please sign in partnership name by authorized person.
