As filed with the Securities and Exchange Commission on December 21, 2006
Registration No. 333-_____

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

DYADIC INTERNATIONAL, INC.

(Exact name of registrant as specified in its charter)

Delaware	**45-0486747**
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)

140 Intracoastal Pointe Drive, Suite 404 **Jupiter, Florida 33477** **(561) 743-8333**	**Mark A. Emalfarb** **Chief Executive Officer and President** **Dyadic International, Inc.** **140 Intracoastal Pointe Drive, Suite 404** **Jupiter, Florida 33477** **(561) 743-8333**
(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)	(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

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Approximate date of commencement of proposed sale to the public:
As soon as practicable after this Registration Statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. ☐

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 (the "Securities Act"), other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. ☒

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, please check the following box. ☐

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, please check the following box. ☐

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price Per Share (2)	Proposed Maximum Aggregate Offering Price (2)	Amount of Registration Fee
Common Stock, par value $0.001	5,581,484	$6.79	$37,898,276	$4,056

(1) The common stock being registered consists of : (i) 2,136,752 shares of common stock issued to an investor in a private placement completed on November 8, 2006; (ii) 2,787,000 shares of common stock issued to investors in a private placement completed on December 1, 2006 and (iii) 657,732 shares of common stock issuable upon exercise of warrants issued to the investors and the placement agent in the private placement completed on December 1, 2006. Pursuant to Rule 416 of the Securities Act, such shares of common stock shall include an indeterminable number of shares of common stock that may be issued in the event of a stock split, stock dividend, anti-dilution adjustment or similar transaction involving the common stock.

(2) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) of the Securities Act based on the average of the high and low sales prices for the common stock on December 15, 2006, as reported by the American Stock Exchange.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordanc Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursua said Section 8(a), may determine.

SUBJECT TO COMPLETION, DATED DECEMBER 21, 2006

The information in this prospectus is not complete and may be changed. The selling stockholders named in this prospectus may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities, and it is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

PROSPECTUS

Dyadic International, Inc.

5,581,484 Shares of Common Stock

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The 5,581,484 shares of our common stock offered by this prospectus include (i) 2,136,752 shares of common stock issued to a selling stockholder identified in this prospectus in a private placement completed on November 8, 2006; (ii) 2,787,000 shares of common stock issued to selling stockholders identified in this prospectus in a private placement completed on December 1, 2006; and (iii) 657,732 shares of common stock issuable upon the exercise of warrants issued to the selling stockholders in the private placement completed on December 1, 2006. For further information regarding these private placements, please see “Summary Description of our Business—Recent Developments” on page 4 of this prospectus.

We are not selling any shares of our common stock under this prospectus and will not receive any of the proceeds from the resale of the shares by the selling stockholders. However, we will receive the exercise price of the warrants when and if they are exercised to the extent so exercised for cash.

Our common stock trades on the American Stock Exchange under the symbol "DIL." On December 15, 2006, the last reported sale price of our common stock as reported on the American Stock Exchange was $6.67 per share.

The selling stockholders, or their pledgees, donees, transferees or other successors-in-interest, may offer the shares from time to time through public or private transactions, on or off the American Stock Exchange, at prevailing market prices or at privately negotiated prices. They may make sales directly to purchasers or to or through agents, broker-dealers or underwriters.

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Investing in our common stock involves a high degree of risk. You should consider carefully the risk factors beginning on page of this prospectus for a discussion of these risks.

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Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

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The date of this prospectus is _____, 2007.

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SUMMARY DESCRIPTION OF OUR BUSINESS

This summary highlights selected information and does not contain all the information that is important to you. You should carefully read this prospectus and the documents we have referred you to in "Incorporation of Certain Documents by Reference" on page for information about us and our financial statements. As used herein, and except as the context may otherwise require, the terms "Company," "we," "us," "our" or "Dyadic" mean, collectively, Dyadic International, Inc. and all of its consolidated subsidiaries.

Our Business

We are a global biotechnology company based in Jupiter, Florida, with operations in the United States of America, Hong Kong and mainland China, Poland and The Netherlands. We are engaged in research and development, the collaborative licensing of our patented and other proprietary technologies to develop and manufacture biological products and the manufacture and sale of industrial enzymes and other proteins for the industrial, biorefinery and pharmaceutical industries, including:

- the textile, pulp & paper, animal feed, alcohol, starch, and food and beverage industries, where we currently sell more than 45 liquid and dry enzyme products to more than 200 industrial customers in approximately 50 countries, which we refer to as our Enzyme Business;

- enzymes and related biotechnological processes for use in converting various agricultural products (e.g. corn), agricultural residue products (e.g. dried distillers grains (DDG's), wheat straw, and sugar cane bagasse) and forestry industry residues (e.g. wood pulp and chips) into fermentable sugars, which can then be used in the production of traditional and cellulosic ethanol, as well as other products currently derived from petroleum, such as plastics and polymers, which we collectively refer to as "Biorefinery Products"; and

- human therapeutic protein candidates, with focus on antibodies, for use by pharmaceutical and biotechnology companies in pre-clinical and clinical drug development applications and commercialization following drug approval, which we refer to as our BioSciences Business.

We have developed and use a number of proprietary fungal strains to produce enzymes and other biomaterials, but the one on which we have principally focused is a patented system for protein production, or protein expression, which we call the C1 Expression System. This System is based on our patented *Chrysosporium lucknowense* fungus, known as C1, as its host production organism. A host production organism is an organism which has been genetically altered to express genes to produce targeted protein products. We discovered the C1 microorganism in the mid-1990's and initially developed it, without the application of molecular biology, to produce neutral cellulases for our textile manufacturing customers. By 1998, we began to apply molecular genetics and other proprietary biotechnology tools to C1 to create a technology, which we refer to as the C1 Host Technology.

We were organized under the name CCP Worldwide, Inc., as a Delaware corporation on September 23, 2002. On October 29, 2004, we completed the merger of our newly created and wholly owned subsidiary, CCP Acquisition Corp., a Florida corporation, with and into a Florida corporation formerly known as Dyadic International, Inc., which was the surviving corporation of the merger and became our wholly owned subsidiary. Following the merger, our new subsidiary changed its name to Dyadic International (USA), Inc. ("Dyadic-Florida") from Dyadic International, Inc., and our name was changed to Dyadic International, Inc. from CCP Worldwide, Inc.

In connection with the merger, we disposed of our then sole operating subsidiary, Custom Craft Packaging, Inc., which was engaged in the packaging business, in a sale of all of the shares of that subsidiary to its founder; all of the then officers and directors of the Company resigned from their positions and were replaced with Dyadic-Florida's officers and directors; and Dyadic-Florida became our sole operating subsidiary. For accounting purposes, the merger was accounted for in a manner identical to a reverse acquisition of the Company by Dyadic-Florida, except that no goodwill or other intangible assets have been recorded. Accordingly, Dyadic-Florida was deemed to be the accounting acquirer of the Company because the former stockholders of Dyadic-Florida became the owners of a majority of the Company's issued and outstanding shares of common stock after the merger, inclusive of shares of common stock issued in the initial closing of the private placement of the Company's securities on the same date as the merger. For reporting purposes, the transaction is equivalent to the issuance of stock by Dyadic-Florida for the net monetary assets of the Company, which after the transactions effected on October 29, 2004 were nil, accompanied by a recapitalization.

Our executive offices are located at 140 Intracoastal Pointe Drive, Suite 404, Jupiter, Florida 33477, and our telephone number is (561) 743-8333. The address of our website is www.Dyadic-Group.com. The contents of our website are not part of this prospectus, and our Internet address is included in this prospectus as an inactive textual reference only.

Recent Developments

On October 26, 2006, we entered into a securities purchase agreement (the "ABRD Securities Purchase Agreement") with Abengoa Bioenergy R&D, Inc. (" ABRD"), a subsidiary of Abengoa Bioenergy Corporation. Also on October 26, 2006, Dyadic-Florida entered into a non-exclusive research and development agreement with ABRD pertaining to the conduct of a research and development ("R&D") program to be completed over a period of approximately three years, under which Dyadic-Florida will seek to apply its proprietary technologies to the development of cost-effective enzyme mixtures and related processing and manufacturing technologies for commercial application in ABRD's bioethanol (cellulosic ethanol) production process (the "R&D Agreement").

Under the terms of the ABRD Securities Purchase Agreement, ABRD invested $10 million in us, for which it was issued 2,136,752 shares of our common stock at $4.68 per share (the closing share price on October 25, 2006, as reported on the American Stock Exchange ("AMEX")). We completed this private sale on November 8, 2006. Under certain circumstances, as described below, we may have to issue additional securities of the Company to ABRD.

We will use the proceeds from this private sale to fund the performance of our R&D obligations under the R&D Agreement over a period of approximately three years, as described below, under which we will seek to apply our proprietary technologies to the development of one or more enzyme mixtures and related processing and manufacturing technologies customized to ABRD's proprietary biomass substrates. The R&D Agreement contemplates that we will perform both (i) research of general application to the cellulosic ethanol field furthering our extensive research and development and large-scale manufacturing technologies for producing large volumes of low cost cellulases, xylanases and other hemicellulases and (ii) research of specific applications for the achievement of the goals of the ABRD R&D Program to develop an economically viable commercial process for the production of large volumes of effective, low cost enzyme mixtures for the proprietary biomass substrates of specific interest to ABRD. In general, we are granted exclusive ownership of all intellectual property we develop in connection with our performance obligation under the R&D Agreement.

Under the terms of the R&D Agreement, if we successfully develop one or more enzyme mixtures and related processing and manufacturing technologies for ABRD and ABRD exercises an option to license on a non-exclusive basis such technologies, we will be entitled to receive license fees, technology transfer fees and royalties on ethanol production by ABRD affiliates, which will be recognized as earned.

Further, under the ABRD Securities Purchase Agreement, we have agreed to use the $10 million to fund our performance of certain foundational and applications research in the cellulosic ethanol field and to spend not less than $10.0 million (the "R&D Spending Obligation") over the course of the "R&D Spend Measurement Period" (the period commencing on October 26, 2006 and ending three years following Steering Committee approval of the initial Statement of Work for calendar year 2007), during which we are to perform research (the amount so expended by Dyadic being referred to as the "Applicable R&D Spend"). If we breach our R&D Spending Obligation, in addition to certain royalty-free, non-exclusive licensing rights which would be granted to ABRD, we are obligated, at ABRD's election, to either (x) issue additional shares of our common stock or (y) remit to ABRD a cash sum, in either instance having a dollar value equal to the amount by which $10.0 million exceeds the dollar value of the Applicable R&D Spend, and if shares are used, they are valued at the greater of (x) $4.68 per share or (y) the closing selling price of the shares on the AMEX on the last trading day in the R&D Spend Measurement Period.

If within 180 days following November 8, 2006 (the closing date of the transactions contemplated by the ABRD Securities Purchase Agreement and the R&D Agreement), we have completed a specified type of transaction involving the sale of our common stock (or convertible securities other than warrants or options) at a price lower than $4.68 per share, ABRD is entitled to have additional shares issued to them so that its investment is at the same price. If within 180 days following November 8, 2006 we have not completed a specified type of transaction involving the sale of our common stock totaling at least $20 million in gross proceeds, then ABRD is entitled to receive three-year warrants to purchase up to 427,351 shares of our common stock at an exercise price of $5.85 per share. If within 180 days following November 8, 2006 we have completed a specified type of transaction involving the sale of our common stock or convertible securities (other than warrants) totaling at least $20 million in gross proceeds in which, in addition to our issuance of common stock, we issue warrants, then ABRD is entitled to receive, in lieu of the three-year warrants, warrants having terms and conditions identical to the terms and conditions of the warrants issued in such specified transaction and for which ABRD would receive pro rata warrant coverage.

The shares issued to ABRD on November 8, 2006 were not registered under the Securities Act of 1933, as amended (the "Securities Act") or any state securities laws. Pursuant to the ABRD Securities Purchase Agreement, we agreed to file a registration statement with the Securities and Exchange Commission ("SEC") covering the resale of the shares issued on November 8, 2006, as well as additional shares, if any, issuable after November 8, 2006. We agreed to file the registration statement of which this prospectus is a part with the SEC by December 23, 2006 and cause it to become effective with the SEC within 210 days following November 8, 2006. We are required to keep the registration statement of which this prospectus is a part effective until the earlier of the date on which the shares have been sold or can be sold publicly under Rule 144(k) of the Securities Act.

We may suspend the use of the registration statement of which this prospectus is a part for a 20-day trading period for as many as two times in any 12-month period. In certain events, including in the event the registration statement of which this prospectus is a part does not become effective timely or ceases to be effective during the registration period due to certain events, we have agreed to pay to ABRD cash, as liquidated damages, on such event and on each monthly anniversary of such event, an amount equal to 1% of (x) the number of shares held by ABRD at time of such event multiplied by (y) the purchase price paid by ABRD for such shares then held, provided that the total amount of all of these payments is not permitted to exceed 10% of the aggregate purchase price paid by ABRD.

Under the ABRD Securities Purchase Agreement, ABRD has agreed for a period of one year following November 8, 2006 to maintain exclusive beneficial ownership of, as well as an exclusive pecuniary interest in, all of the shares and other securities, if any, issuable to it pursuant to the ABRD Securities Purchase Agreement. Furthermore, ABRD has agreed for a period of two years following November 8, 2006 to refrain from directly or indirectly increasing its beneficial ownership, or pecuniary interest, to more than 15% of our shares.

The foregoing description of the ABRD Securities Purchase Agreement and the R&D Agreement is qualified in its entirety by reference to our Current Report on Form 8-K dated October 26, 2006, as filed with the SEC on November 1, 2006.

On November 17, 2006, we entered into a securities purchase agreement (the “Securities Purchase Agreement”) with certain investors to purchase in a private placement 2,787,000 shares of our common stock at a price of $4.68 per share and warrants to purchase up to 557,400 shares of our common stock at an exercise price of $6.33 per share for gross proceeds of $13,043,160. We completed this private placement on December 1, 2006. Cowen and Company, LLC acted as the exclusive placement agent for the private placement for which we issued to it warrants to purchase up to 83,610 shares of our common stock at $5.24 per share and warrants to purchase up to 16,722 shares of our common stock at $6.33 per share.

The warrants issued to the investors become exercisable on May 31, 2007, expire three years thereafter, contain price adjustment and economic anti-dilution features, as well as anti-dilution protection from stock splits and similar events, contain limited cashless exercise procedures and are callable by us under certain circumstances. The warrants issued to the placement agent are substantially identical to the warrants issued to the investors, except that (i) the warrant for 83,610 shares has an exercise price of $5.24 per share rather than $6.33 per share and (ii) they have a five-year term rather than a three-year term and (iii) they provide for unqualified cashless exercise procedures rather than limited cashless exercise procedures.

We will use the resulting net proceeds of approximately $12,300,000 to continue development of our C1 Host Technology for applications in the markets targeted by our businesses, with the goal of strengthening our product pipeline and accelerating the commercial launch of new products in pulp and paper, animal feed and other areas, and expanding R&D infrastructure as well as sales and marketing efforts.

The securities issuable to the investors at the closing of the private placement were not be registered under the Securities Act or any state securities laws. Pursuant to the Securities Purchase Agreement, we have agreed to file a registration statement with the SEC covering the resale of the shares issued to the investors at closing and the shares of common stock underlying the warrants issued to the investors at closing. We agreed to file the registration statement of which this prospectus is a part with the SEC within 45 days following December 1, 2006 and cause it to become effective with the SEC within 135 days following December 1, 2006. We are required to keep the registration statement of which this prospectus is a part effective until the earlier of the date on which the shares have been sold or can be sold publicly under Rule 144(k) of the Securities Act. We may suspend the use of the registration statement for a 20-day trading period for as many as two times in any 12-month period. In certain events, including in the event the registration statement of which this prospectus is a part does not become effective timely or ceases to be effective during the registration period due to certain events, we have agreed to pay each investor cash, as liquidated damages, on such event and on each monthly anniversary of such event, an amount equal to 1% of (x) the number of shares held by such investor at time of such event multiplied by (y) the purchase price paid by such investor for such shares then held, provided that the total amount of all of these payments is not permitted to exceed 10% of the aggregate purchase price paid by all investors.

The foregoing description of the Securities Purchase Agreement and the private placement and the other transactions contemplated thereby is qualified in its entirety by reference to our Current Report on Form 8-K dated November 17, 2006, as filed with the SEC on November 21, 2006.

RISK FACTORS

In addition to the other information contained and incorporated by reference in this prospectus, you should carefully consider the following factors before purchasing any of the common stock offered under this prospectus.

Risks General to Our Businesses

We should be viewed as an early-stage company.

The combination of our Enzyme Business's reliance upon the expansion of the capabilities of our C1 Expression System and the early-stage, developmental nature of our BioSciences Business and our Biorefineries Products require that we be characterized as an early-stage company. Our conduct of the BioSciences Business and our commercialization of Biorefinery Products are subject to the risks customarily attending the operations of any early-stage company, including the development of new technologies and products, the assembly and development of production and R&D capabilities, the construction of channels of distribution and the management of growth, as discussed in the following risk factors.

We have a history of net losses, and may not achieve or maintain profitability.

We have an accumulated deficit of approximately $41.7 million at September 30, 2006. Because we accelerated our R&D activities and expanded both our sales and marketing and technical support staffs, we have experienced increased levels of net losses and negative cash flow. Whether we achieve profitability, and the size of our net losses prior to that time, will depend, in large part, on the rate of growth, if any, of our Enzyme Business, whether our BioSciences Business is able to generate contract sales or other sales, whether we can commercialize Biorefinery Products and on the level of our expenses. To date, we have derived almost 100% of our sales from the operations of our Enzyme Business. We do not anticipate material sales from the operation of the BioSciences Business sooner than 2007 or later. Our Enzyme Business may not be able to penetrate new markets or enjoy the improved profit margins we anticipate, which could materially adversely impact that business's growth potential and profitability. Sales from our BioSciences Business are uncertain because our ability to secure future collaboration agreements will depend upon the ability of the BioSciences Business to perfect our C1 Host Technology to address the needs of the pharmaceutical and biotech industries. Similarly, our ability to commercialize Biorefinery Products is uncertain. We expect to spend significant amounts to fund R&D and enhance our core technologies. As a result, we expect that our operating expenses will increase significantly in the near term and, consequently, that we will need to generate significant additional sales to achieve profitability. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis.

We could fail to manage our growth, which would impair our business.

Our business plan contemplates that we will grow at a rapid rate, both in terms of sales and personnel. It is difficult to manage growth, and our future success depends on our ability to efficiently and effectively implement:

- research and product development programs which overcome scientific challenges and develop new products and processes;
- sales, marketing, technical service and customer support programs;
- operational and financial control systems; and
- recruiting and training programs.

Our ability to offer products and services successfully and to implement our business plan in a rapidly evolving global market requires effective planning, reporting and management processes. We expect that we will need to continue to improve our financial and managerial controls, reporting systems and procedures and to expand and train our workforce worldwide. We also need to continue to manufacture our products efficiently and to control or adjust the expenses related to R&D, marketing, sales and general and administrative activities in response to changes in sales. If we are not successful in efficiently manufacturing our products or managing such expenses, there could be an adverse impact on our results of operations, our financial condition and the continued viability of our business.

Our market share growth depends on costly new product introductions and market acceptance.

The future success of our Enzyme Business will depend greatly on our ability to continuously and timely develop and introduce new products that address evolving market requirements and are attractive to customers. We are relying on our C1 Expression System and our other proprietary technologies to expand our Enzyme Business product line and improve our gross margins on those products. If we fail to introduce new and innovative products, we could fail to obtain an adequate return on our R&D investments and could lose market share to our competitors, which might be difficult or impossible to regain. Any inability, for technological or other reasons, to develop successfully and introduce new products could reduce our growth rate or otherwise damage our business.

Further, in the past we have experienced, and we are likely in the future to experience, delays in the development and introduction of products. For example, our efforts to complete the development of a high throughput system using our C1 organism have taken considerably longer, cost more and have proven to be much more difficult than we had anticipated, forcing us to sharply scale back our continued development efforts and seek a new collaborative partner. We may not be able to keep pace with the rapid rate of change in our markets or to develop new products or processes that will meet the requirements of the marketplace or achieve market acceptance. Some of the factors affecting market acceptance of our products include:

- availability, quality, performance and price as compared to competitive products;
- the functionality of new and existing products;
- the timing of introduction of our products as compared to competitive products;
- scientists' and customers' opinions of our products' utility and our ability to incorporate their feedback into our future products; and
- citation of the products in published research.

The expenses or losses associated with unsuccessful product development activities or lack of market acceptance of our new products could seriously harm our business, financial condition and results of operations.

Our dependence on contract manufacturers could harm our business.

Our Enzyme Business currently relies on contract manufacturers for all of its manufacturing. If we require additional manufacturing capacity and are unable to obtain it in sufficient quantity, we may not be able to increase our sales, or may be required to make very substantial capital investments to build that capacity.

Our manufacturing capabilities, and any current or future arrangements with third parties for these activities, may not be adequate for the successful commercialization of our industrial enzyme products. In the operation of the Enzyme Business, all of our industrial enzymes have over the past decade, and are expected over the foreseeable future to be, produced at the manufacturing facilities of contract manufacturers. As a result, we are dependent upon the performance and plant capacity of third-party manufacturers. Though we formerly used two contract manufacturers, we let our agreement with one of those contract manufacturers expire and now only use it on a highly limited basis. Our Enzyme Business, therefore, faces risks of difficulties with, and interruptions in, performance by these third parties of their manufacturing responsibilities, the occurrence of which could adversely impact the availability, launch and/or sales of our products in the future. For example, our principal contract manufacturer, Polfa Tarchomin, S.A., which has been producing a number of our products since 2001 without interruption has concluded an agreement with us to provide an additional 50 cubic meters of fermentation capacity and associated recovery capacity with the majority of the capital necessary for this expansion to be provided by them. This expansion has been substantially completed. Dyadic has committed to direct payment for certain removable equipment for this expansion of approximately $1.0 million.

However, with the expiration of our contract manufacturing agreement with our second, and only other, contract manufacturer, we are currently utilizing their services on an as needed basis. The majority of our production requirements will be satisfied by the single manufacturing facility operated by our Polish contract manufacturer, leaving us vulnerable to a failure of performance by it.

Regulations may limit or impair our ability to sell genetically engineered products in the future.

We develop enzyme products using both non-genetically engineered microorganisms, as well as those that have undergone some degree of genetic modification. Products derived from genetically modified organisms, or GMOs, are subject to regulation by federal, state, local and foreign government agencies. These agencies administering existing or future applicable regulation or legislation may not allow us to produce and market our products derived from GMOs in a timely manner or under technically or commercially feasible conditions.

In addition, regulatory action or private litigation could result in expenses, delays or other impediments to our product development programs or the commercialization of resulting products. The U.S. Food and Drug Administration, or FDA, currently applies the same regulatory standards to products made through genetic engineering as those applied to products developed through traditional methodologies. Depending on a product's application and regardless of its GMO status, it may be subject to lengthy FDA reviews and unfavorable FDA determinations if there are safety concerns or if the FDA changes its current regulatory policy. The European Union, or the EU, has regulations regarding the development, production and marketing of products from GMOs which are generally more restrictive than present U.S. regulations. For example, among other requirements, EU animal feed registration requires in-vivo efficacy testing, as well as toxicological testing of all enzyme products, including products from non-GMO microorganisms. The regulatory agencies administering these and future regulations may hinder our ability to produce and bring to market some of our enzyme products in a timely manner or under technically or commercially feasible conditions.

Risks Specific to Our BioSciences Business

We may fail to commercialize our C1 Expression System for the expression of therapeutic proteins.

Although our Enzyme Business has developed and sold industrial enzyme products and has used our C1 Expression System to develop such products, our BioSciences Business has not yet completed commercialization of our C1 Expression System for the expression of therapeutic proteins. If our BioSciences Business fails to do this, we may be forced to terminate the BioSciences Business's operations and liquidate it.

Our BioSciences Business must be evaluated as having the same risks as those inherent in early-stage biotechnology companies because the application of our C1 Expression System to the expression of pre-clinical and clinical quantities of therapeutic proteins is still in development. We may not be able to successfully harness the C1 Expression System to achieve those objectives. Further, we may not be able to expand the capabilities of the C1 Expression System to produce commercial volumes of therapeutic proteins at reasonable costs. Also, we may not ever be able to successfully complete development of our fungal high throughput system. And, even if the BioSciences Business is able to achieve any of those accomplishments, we may not be able to successfully develop the C1 Screening System to serve the functions of gene discovery or the development of new and/or improved protein drugs. Successful development of the C1 Host Technology for these purposes will require significant development and investment, including testing, to prove its efficacy and cost-effectiveness. To date, drug companies have developed and commercialized only a small number of gene-based products in comparison to the total number of drug molecules available in the marketplace. In this regard, we are heavily dependent upon our use of third-party research organizations to assist us in the development of the C1 Host Technology. In general, our experience has been that each step in the process has taken longer and cost more to accomplish then we had originally projected, and we anticipate that this is likely to remain the case with respect to our BioSciences Business' continuing development efforts.

Commercialization of our C1 Expression System for therapeutic proteins depends on collaborations.

Commercialization of our C1 Expression System by our BioSciences Business depends on collaborations with other parties. If we are not able to find collaborators in the future, the BioSciences Business may not be able to develop the C1 Expression System or therapeutic protein products. Further, our business model relies on a revenue stream derived from collaboration projects to be conducted with our customers to express laboratory-testing quantities of therapeutic proteins. A large portion of the anticipated financial reward depends on those therapeutic proteins progressing through drug development and into commercially successful drugs. Apart from risks relating to whether our BioSciences Business can capture such customers, or capture them on satisfactory terms, we will have no control over post-collaboration project drug development and commercialization. Further, conflicts could arise between us and our customers or among them and third parties that could discourage or impede the activities of our BioSciences Business.

Since we do not currently possess the financial resources necessary to develop and commercialize potential drug products that may result from our C1 Expression System, or the resources to complete any approval processes which may be required for these products, we must enter into collaborative arrangements to develop and commercialize drug products. It is expected that these arrangements will be for fixed terms and will expire after a fixed period of time. If they are not renewed or if we do not enter into new collaborative agreements, our sales will be reduced and our products may not be commercialized.

We have limited or no control over the resources that any collaborator may devote to our programs.

We have limited or no control over the resources that any collaborator may devote to our products. Any of our future collaborators may not perform their obligations as expected. These collaborators may breach or terminate their agreement with us or otherwise fail to conduct their collaborative activities successfully and in a timely manner. Further, our collaborators may elect not to develop products arising out of our collaborative arrangements or devote sufficient resources to the development, manufacture, market or sale of these products. If any of these events occur, we may not be able to develop our technologies or commercialize our products.

Potential therapeutic products developed by us or with our customers or collaborators are subject to a lengthy and uncertain regulatory process. If these therapeutic protein products are not approved, we or our customers or collaborators will not be able to commercialize them, and we may not receive the milestone and royalty payments which are based upon the successful advancement of these products through the drug development and approval process.

The FDA must approve any therapeutic product before it can be marketed in the United States. Before our collaborators can file a new drug application or biologic license application with the FDA, the product candidate must undergo extensive testing, including animal and human clinical trials, which can take many years and require substantial expenditures. Data obtained from such testing are susceptible to varying interpretations which could delay, limit or prevent regulatory approval. In addition, changes in regulatory policy for product approval during the period of product development and regulatory agency review of each submitted new application or product license application may cause delays or rejections.

Because these products involve the application of new technologies and may be based upon new therapeutic approaches, they may be subject to substantial review by government regulatory authorities and, government regulatory authorities may grant regulatory approvals more slowly for these products than for products using more conventional technologies. While we anticipate that most of our collaborators will have experience submitting an application to the FDA or any other regulatory authority, we have no such experience, and neither we nor any collaborator has yet submitted an application with the FDA or any other regulatory authority for any product candidate generated through the use of our C1 Expression System, nor has the FDA nor any other regulatory authority approved any therapeutic product candidate developed using our C1 Expression System for commercialization in the United States or elsewhere. Our collaborators may not be able to conduct clinical testing or obtain the necessary approvals from the FDA or other regulatory authorities for our products. The regulatory agencies of foreign governments must also approve our therapeutic products before the products can be sold in those other countries.

Even after investing significant time and expenditures, our collaborators may not obtain regulatory approval for their products. Even if they receive regulatory approval, this approval may entail limitations on the indicated uses for which we can market a product. Further, once regulatory approval is obtained, a marketed product and its manufacturer are subject to continual review, and discovery of previously unknown problems with a product or manufacturer may result in restrictions on the product, manufacturer and manufacturing facility, including withdrawal of the product from the market. In certain countries, regulatory agencies also set or approve prices.

Health care reform may limit our profitability or that of our customers.

Our C1 Host Technology is being developed to assist our customers or collaborators in the development of future therapeutic products, including pharmaceutical products. The ability of our collaborators to commercialize pharmaceutical products developed with our C1 Host Technology may depend in part on the extent to which reimbursement for the cost of those products will be available from government health administration authorities, private health insurers and other organizations. Third-party payers are increasingly challenging prices of medical products and services. Significant uncertainty exists as to the reimbursement status of newly approved health care products, and there can be no assurance that adequate third party coverage will be available for any product to enable us to maintain price levels sufficient to realize an appropriate return on our investment in research and product development.

Adverse events in the field of therapeutic products may adversely affect us or our collaborators.

Currently, we are not engaged in developing therapeutic products for our own account, but instead intend to collaborate with drug companies to express therapeutic products requested by them for the ultimate purpose of their development, testing and introduction as new drugs. We may, however, engage in these activities in the future for our own account. If we or our collaborators develop therapeutic products, these products may encounter substantial delays in development and approval due to the government regulation and approval process. Adverse events reported in gene therapy clinical trials may lead to more government scrutiny of proposed clinical trials of therapeutic products, stricter labeling requirements for these products and delays in the approval of other types of products for commercial sale.

Our C1 Expression System has been tested for use in pulp and paper production, which requires FDA approval as generally regarded as safe, or GRAS, and has generated promising safety and toxicity data for one enzyme. A risk nonetheless exists that the C1 Expression System will produce therapeutic products and enzymes that have safety and toxicity issues associated with them.

We believe our determination of the genome sequence of our C1 host organism could help to mitigate our risk that there are unexpected safety and toxicity issues associated with our C1 Expression System and facilitate our ability to find and express new genes of bio-therapeutic and other commercial value. However, there can be no assurance that annotation of the C1 will be fully or adequately completed, and until it is successfully completed, we are at a distinct competitive disadvantage to some of our competitors, whose host organisms have been more thoroughly researched and whose genomes have been fully annotated.

Risks Applicable to the Commercialization of Biorefinery Products

Commercialization of Biorefinery Products depends on collaborative partnerships.

Because we do not have the manufacturing infrastructure and financial resources to develop large scale-enzyme production and manufacturing processes for the commercialization of our Biorefinery Products, our ability to commercialize our Biorefinery Products will depend on our entering into collaborative partnerships like our recent one with Abengoa Bioenergy R&D, Inc. We are considering additional collaborative partnerships, though there is no assurance that we will able to complete any additional ones on terms acceptable to us or at all.

Commercialization of Cellulosic Ethanol may not be feasible.

Although cellulosic ethanol should reduce the United States' dependence on imported oil, increase its energy security and reduce its trade deficit, commercialization of cellulosic ethanol in the United States or elsewhere may not be feasible for a variety of reasons. Among others, there has been to date a lack of significant private and government funding for research and development in conversion and processing technologies, as well as for the development of biorefineries. Furthermore, there has been to date very little, if any, well directed public policies emphasizing investment and providing incentives for the commercialization and transition to cellulosic ethanol. The current United States Presidential administration has recently been publicizing the benefits of cellulosic ethanol, though it remains to be seen whether or not such publicity will engender significant government funding and economic incentives to mitigate some of the foregoing barriers to commercialization of cellulosic ethanol. Our recent collaborative partnership with Abengoa Bioenergy R&D, Inc. may suggest that these barriers are surmountable, although there are no assurances in this regard.

The United States Ethanol Industry is highly dependent upon a myriad of federal and state legislation and regulations and any changes in such legislation or regulation could materially and adversely affect the demand for our Biorefinery Products.

The United States Ethanol Industry is highly dependent upon a myriad of federal and state legislation and regulations. Any changes in such legislation or regulation could materially and adversely affect the demand for our Biorefinery Products. For example, under the Energy Policy Act of 2005, the U.S. Department of Energy, in consultation with the U.S. Secretary of Agriculture and the U.S. Secretary of Energy, may waive the Renewable Fuels Standard, or RFS, mandate with respect to one or more states if the Administrator determines that implementing the requirements would severely harm the economy or the environment of a state, a region or the United States, or that there is inadequate supply to meet the requirement. In addition, the Department of Energy was directed under the Energy Policy Act of 2005 to conduct a study by January 2006 to determine if the RFS will have a severe adverse impact on consumers in 2006 on a national, regional or state basis. Based on the results of the study, the Secretary of Energy must make a recommendation to the EPA as to whether the RFS should be waived for 2006. Any waiver of the RFS with respect to one or more states or with respect to 2006 would adversely offset demand for ethanol and, thus, diminish demand for Biorefinery Products.

Risks Applicable to Our Enzyme Business, BioSciences Business and Biorefinery Products

Alternative technologies may diminish the need for producing some enzymes the way we do.

Many of our enzyme products are produced in fermenters. Some of the product segments we hope to serve may not find it efficient to use the fermenter processes we employ. For example, bio-ethanol and other bio-fuels production represents a considerable market opportunity for enzymes comprising Biorefinery Products. However, research being conducted within the auspices of major seed producers, U.S. federal government and corn growers association may supplant the need for enzymes produced in fermenters, which is the enzyme production process we currently use.

Reductions in R&D budgets may affect the sales of our Businesses.

Our customers include researchers at customers of our Enzyme Business, potential drug company customers of our BioSciences Business and potential energy companies for our Biorefinery Products. Fluctuations in the R&D budgets of these researchers and their organizations could have a significant effect on the demand for our products. Research and development budgets fluctuate due to changes in available resources, consolidation in the pharmaceutical and energy industries, spending priorities and institutional budgetary policies. Our Businesses could be seriously damaged by any significant decrease in life sciences and/or renewable fuels R&D expenditures by these existing and potential customers, academic institutions, government laboratories or private foundations.

Conflicts with our collaborators could harm our business.

An important part of our strategy involves conducting proprietary research programs. We may pursue opportunities in fields that could conflict with those of our collaborators. Moreover, disagreements with our collaborators could develop over rights to our intellectual property. Any conflict with our collaborators could reduce our ability to obtain future collaboration agreements and negatively impact our relationship with existing collaborators, which could reduce our sales.

Certain of our collaborators could also become competitors in the future. Our collaborators could develop competing products, preclude us from entering into collaborations with their competitors, fail to obtain timely regulatory approvals, terminate their agreements with us prematurely or fail to devote sufficient resources to the development and commercialization of products. Any of these developments could harm our product development efforts.

We will either commercialize products resulting from our proprietary programs directly or through licensing to other companies. We have limited experience in manufacturing and marketing products for the pharmaceutical, biotechnology and energy industries. In order for us to commercialize these products directly, we would need to develop, or obtain through outsourcing arrangements, the capability to market and sell these products. We do not have these capabilities, and we may not be able to develop or otherwise obtain the requisite marketing and sales capabilities. If we are unable to successfully commercialize products resulting from our proprietary research efforts, we will continue to incur losses.

Public views on ethical and social issues may limit use of our technologies and reduce our sales.

Our success will depend in part upon our ability to develop products discovered through our C1 Host Technology. Governmental authorities could, for social or other purposes, limit the use of genetic processes or prohibit the practice of our C1 Host Technology. Ethical and other concerns about our C1 Host Technology, particularly the use of genes from nature for commercial purposes, and products resulting there from, could adversely affect their market acceptance.

If the public does not accept genetically engineered products, our product demand could decline.

The commercial success of our potential products will depend in part on public acceptance of the use of genetically engineered products including drugs, plants and plant products. Claims that genetically engineered products are unsafe for consumption or pose a danger to the environment may influence public attitudes. Our genetically engineered products may not gain public acceptance in the various industrial, pharmaceutical, biotechnology or energy industries. Negative public reaction to genetically modified organisms and products could result in greater government regulation of genetic research and resultant products, including stricter labeling laws or regulations, and could cause a decrease in the demand for our products.

The subject of genetically modified organisms has received negative publicity in Europe and other countries, which has aroused public debate. The adverse publicity in Europe could lead to greater regulation and trade restrictions on imports of genetically altered products. If similar adverse public reaction occurs in the United States, genetic research and resultant products could be subject to greater domestic regulation and a decrease in the demand for our products could result.

Other Business Risks That We Face

We must continually offer new products and technologies.

The industrial enzymes and biotechnology industries are characterized by rapid technological change, and the area of gene research is a rapidly evolving field. Our future success will depend on our ability to maintain a competitive position with respect to technological advances. Rapid technological development by others may result in our products and technologies becoming obsolete.

Any products that we develop through our C1 Host Technology will compete in highly competitive markets. Many of the organizations competing with us in the markets for such products have greater capital resources, R&D and marketing staffs and facilities and capabilities, and greater experience in obtaining regulatory approvals, manufacturing products and marketing. Accordingly, our competitors may be able to develop technologies and products more easily which would render our technologies and products and those of our collaborators obsolete and noncompetitive. If a competitor develops superior technology or cost-effective alternatives to our products or processes, our business, operating results and financial condition could be seriously harmed. In addition, demand for our products may weaken due to reduction in R&D budgets or loss of distributors, any of which might have an adverse effect on our financial condition.

The markets for our Enzyme Business's products are, in many cases, very competitive and price sensitive. Our Enzyme Business currently competes with five much larger competitors, each with dominant market positions in segments in which we compete and who, as a group, hold approximately 70% market share in the present industrial enzymes marketplace. Each of these competitors has substantially greater financial, operational, sales and marketing resources than we do and very significant experience in R&D. Further, these competitors may possess other complementary technologies, such as proprietary directed molecular evolution technology, which may be more effective at implementing their technologies to develop commercial products than our complementary technologies implement our C1 Host Technology. Also, some of these competitors have entered into collaborations with leading companies within our Enzyme Business's target markets to produce enzymes for commercial purposes.

Well-known, and better financed, biotechnology companies offer competing technologies for the same products and services as our BioSciences Business plans to offer using our C1 Host Technology. Customers may prefer existing competing technologies over our C1 Host Technology. Our BioSciences Business also faces, and will continue to face, intense competition from organizations such as large biotechnology companies, as well as academic and research institutions and government agencies that are pursuing competing technologies to enable production of therapeutic and other proteins and bio-molecules of commercial interest at economically viable costs. These organizations may develop technologies that are superior alternatives to our C1 Host Technology. We anticipate that our BioSciences Business will face increased competition as new companies enter our markets and as development of biological products evolves.

We may need additional capital in the future.

Our future capital requirements may be substantial, particularly as we continue to develop the C1 Host Technology to commercialize Biorefinery Products and if completion of the development of our C1 Expression System for our BioSciences Business takes longer or requires greater resources than we had expected, if we continue to develop the C1 Expression System to expand its production capabilities to manufacture commercial volumes of therapeutic proteins, if we continue to develop a C1 Screening System, or if our BioSciences Business develops a number of therapeutic products. Although we believe that we have sufficient cash on hand to fund our operations and meet our obligations through December 31, 2008, our need for additional capital will depend on many factors, including the financial success of our Enzyme Business, whether we are successful in obtaining payments from BioSciences Business customers under collaborative agreements, whether we are successful in our R&D efforts with Abengoa Bioenergy R&D, Inc., whether we can enter into additional collaborative partnerships for commercialization of our Biorefinery Products, the progress and scope of our collaborative and independent R&D projects performed by our customers and collaboration partners, the effect of any acquisitions of other businesses that we may make in the future, and the filing, prosecution and enforcement of patent claims.

If our capital resources are insufficient to meet our capital requirements through December 31, 2008, we will have to raise additional funds to continue the development of our technologies and complete the commercialization of products, if any, resulting from our technologies. If future raises of funds do occur, they may cause dilution to our existing stockholders. We may not be able to raise additional funds on terms that are acceptable to us or on any terms whatsoever, or we may be unable to raise sufficient additional capital. If we fail to raise sufficient funds, and our Enzyme Business is unable to generate sufficient levels of profitability, we may have to curtail or cease, or dispose of, one or more of our operations.

We will need to expand our existing marketing and sales resources.

While we have recently expanded our marketing and sales functions, our Enzyme Business will need to continue to expand them to achieve our contemplated annual rates of growth and for our BioSciences Business to successfully market the C1 Expression System and our contemplated C1 Screening System. Currently, we rely primarily on our direct sales force for the United States market and contract with professional sales agents and distributors for the international market, including two controlled foreign subsidiaries. Direct salespeople are our employees and are paid a salary plus commissions on sales they make within their assigned territories. Contracted sales agents are paid a base rate of compensation plus commissions on sales they make within their assigned territories. Distributors purchase products from us and then resell our products and services to third parties. Our officers and employees develop and implement our marketing strategy, although we do periodically engage non-employee consultants, acting as independent contractors, to assist us in these efforts.

Market forces, such as increasing competition, increasing cost pressures on our customers and general economic conditions, may require us to devote more resources to our sales and marketing efforts than we currently contemplate, such as changing the composition of our sales and marketing staff and changing our marketing methods. These changes may result in additional expenses. In addition, we will incur additional salary expenses because we intend to increase our direct sales force. We also may hire direct sales representatives to replace independent sales representatives or distributors that we use. Similarly, if we increase our reliance on marketing consultants to assist us, we will incur greater costs. If we decide to increase our advertising, we will also incur higher sales and marketing costs. Our incurrence of increased costs will make it more difficult for us to operate profitably, and we may not have sufficient funds to support all of these costs.

If we expand our sales force and increase our marketing activities, we can offer no assurances that those efforts will result in more sales or higher revenue. Also, the increased costs we incur by expanding our sales and marketing resources may not result in greater sales or in higher revenue. Further, even if we increase our spending on sales and marketing, we may not be able to maintain our current level of sales and revenue.

Loss of key personnel could hurt our business.

We are highly dependent on the principal members of our management and scientific staff, the loss of whose services might adversely impact the achievement of our objectives. In addition, recruiting and retaining qualified scientific personnel to perform future R&D work will be critical to our success. We currently do not have sufficient executive management personnel to fully execute our business plan. Although we believe we will be successful in attracting and retaining qualified management and scientific personnel, such as the addition of our Chief Scientific Officer, Glenn Nedwin in March 2006, competition for experienced scientists from numerous companies and academic and other research institutions may limit our ability to do so on acceptable terms. Failure to attract and retain scientific personnel would prevent us from pursuing collaborations or developing our products or core technologies.

Our planned activities will require additional expertise in specific industries and areas applicable to the products developed through our technologies. These activities will require the addition of new personnel, including management, and the development of additional expertise by existing management personnel. The inability to acquire these services or to develop this expertise could impair the growth, if any, of our business.

Our directors and senior officers require that we maintain directors and officers insurance at levels comparable to those of similar sized public companies. We have purchased such directors' and officers' liability insurance. Our efforts to recruit additional directors could be impeded if the amount of insurance coverage is viewed to be insufficient. Further, if we are unable to provide adequate compensation or are unable to maintain sufficient directors' and officers' insurance coverage, we may not be able to attract or retain key personnel.

Personnel changes may disrupt our operations. Hiring and training new personnel will entail costs and may divert our resources and attention from revenue-generating efforts. From time to time, we also engage consultants to assist us in our business and operations. These consultants serve as independent contractors, and we, therefore, do not have as much control over their activities as we do over the activities of our employees. Our consultants may be affiliated with or employed by other parties, and some may have consulting or other advisory arrangements with other entities that may conflict or compete with their obligations to us. Inventions or processes discovered by these persons will not necessarily become our property.

Inability to protect our technologies could harm our ability to compete.

Our success will depend in part on our ability to obtain patents and maintain adequate protection of our other intellectual property for our technologies and products in the United States and other countries. If we do not adequately protect our intellectual property, competitors may be able to practice our technologies and erode our competitive advantage. The laws of some foreign countries do not protect proprietary rights to the same extent as the laws of the United States, and many companies have encountered significant problems in protecting their proprietary rights in these foreign countries. These problems can be caused by, for example, a lack of rules and methods for defending intellectual property rights.

We hold four issued U.S. patents and 27 issued and 2 allowed international patents, including claims that cover the C1 Expression System and various other aspects of the C1 Host Technology, and 50 U.S. and international filed and pending patent applications which we believe provide broad protection for our C1 Expression System, our underlying C1 Host Technology and C1 Screening System and their products and commercial applications. However, the patent positions of biotechnology companies, including our patent position, are generally uncertain and involve complex legal and factual questions. We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our proprietary technologies are covered by valid and enforceable patents or are effectively maintained as trade secrets. We intend to apply for patents covering both our technologies and products as we deem appropriate. However, existing and future patent applications may be challenged and may not result in issued patents. Our existing patents and any future patents we obtain may not be sufficiently broad to prevent others from practicing our technologies or from developing competing products. Furthermore, others may independently develop similar or alternative technologies or design around our patented technologies. In addition, others may challenge or invalidate our patents, or our patents may fail to provide us with any competitive advantages.

Not all of our proprietary technology is eligible for patent protection. Accordingly, as to significant portions of our various proprietary technologies, we rely upon trade secret protection for our confidential and proprietary information. We have taken security measures to protect our proprietary information. These measures may not provide adequate protection for our trade secrets or other proprietary information. We seek to protect our proprietary information by entering into confidentiality agreements with employees, collaborators and consultants. Nevertheless, employees, collaborators or consultants may still disclose our proprietary information, and we may not be able to meaningfully protect our trade secrets. In addition, others may independently develop substantially equivalent proprietary information or techniques or otherwise gain access to our trade secrets.

Intellectual property litigation could harm our business.

Our commercial success depends in part on neither infringing patents and proprietary rights of third parties, nor breaching any licenses that we have entered into with regard to our technologies and products. Others have filed, and in the future are likely to file, patent applications covering genes or gene fragments that we may wish to utilize with our C1 Host Technology, our C1 Expression System, our C1 Screening System or products or systems that are similar to products developed with the use of our C1 Host Technology. If these patent applications result in issued patents and we wish to use the claimed technology, we would need to obtain a license from the third party.

Third parties may assert that we are employing their proprietary technology without authorization. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes these patents. We could incur substantial costs and diversion of management and technical personnel in defending ourselves against any of these claims or enforcing our patents or other intellectual property rights against others. Furthermore, parties making claims against us may be able to obtain injunctive or other equitable relief which could effectively block our ability to further develop, commercialize and sell products, and could result in the award of substantial damages against us. If a claim of infringement against us is successful, we may be required to pay damages and obtain one or more licenses from third parties. We may not be able to obtain these licenses at a reasonable cost, if at all. In that event, we could encounter delays in product commercialization while we attempt to develop alternative methods or products. Defense of any lawsuit or failure to obtain any of these licenses could prevent us from commercializing available products.

Further, the taxonomic classification of our C1 host organism was determined using classical morphological methods. More modern taxonomic classification methods indicate that our C1 host organism will be reclassified as a different genus and species. We anticipate that with the genomic sequence and after the expected completion of the annotation of the C1 genome, we will be better positioned to determine the genus and species of the C1 Host organism. Some of the possible species that the C1 host could be reclassified as could be the subject of patent rights owned by others. We believe, based on our evaluation of the relevant field of science and our discussions with our consulting professionals, that any such patent rights would be invalid, and were litigation over the issue to ensue, we believe we should prevail. If we did not prevail, to settle any such litigation or pre-litigation claims, we could be required to enter into a cross-licensing arrangement, pay royalties or be forced to stop commercialization of some of our activities.

We do not fully monitor the public disclosures of other companies operating in our industry regarding their technological development efforts. If we did evaluate the public disclosures of these companies in connection with their technological development efforts and determined that they violated our intellectual property or other rights, we would anticipate taking appropriate action, which could include litigation. However, any action we take could result in substantial costs and diversion of management and technical personnel. Furthermore, the outcome of any action we take to protect our rights may not be resolved in our favor or may not be resolved for a lengthy period of time.

We may be sued for product liability.

We may be held liable if any product we develop, or any product which is made with the use or incorporation of, any of our technologies, causes injury or is found otherwise unsuitable during product testing, manufacturing, marketing or sale. These risks are inherent in the development of chemical, agricultural and pharmaceutical products. While we maintain product liability insurance, it may not fully cover our potential liabilities. Inability to obtain sufficient insurance coverage at an acceptable cost or otherwise to protect against potential product liability claims could prevent or inhibit the commercialization of products developed by us or our collaborators. If we are sued for any injury caused by our products, our liability could exceed our total assets.

International unrest or foreign currency fluctuations could adversely affect our results.

International sales accounted for approximately 86% and 91% of our net sales in 2004 and 2005, respectively, and accounted for a vast portion of our net sales for the nine-months ended September 30, 2006. Our key international markets are the European Union, Hong Kong, the Peoples Republic of China and India. Our international sales are made through international distributors and their wholly owned subsidiaries, including our Asian subsidiary, and direct to end-user plants with payments to us, in many cases, denominated in currencies other than U.S. dollars. In the conduct of our business, in a number of instances, we are required to pay our obligations in currencies other than U.S. dollars. Accordingly, we are exposed to changes in currency exchange rates with respect to our international sales and payment obligations. We incurred currency losses in 2004 of $213,471 and currency gains in 2005 of $16,785. For the nine-months ended September 30, 2006, we incurred currency losses of approximately $111,000 as compared to currency gains of approximately $27,000 for the nine-months ended September 30, 2005.

Fluctuations in currency exchange rates have in the past and may in the future negatively affect our ability to price competitively against products denominated in local currencies. Also, changes in foreign currency exchange rates may have an adverse effect on our financial position and results of operations as expressed in U.S. dollars. Our management monitors foreign currency exposures and may, in the ordinary course of business, enter into foreign currency forward contracts or options contracts related to specific foreign currency transactions or anticipated cash flows. We do not hedge, and have no current plans to hedge in the future, the translation of financial statements of consolidated subsidiaries whose local books and records are maintained in foreign currency.

The imposition of duties or other trade barriers, trade embargoes, acts of terrorism, wars and other events outside our control may adversely affect international commerce and impinge on our ability to manufacture, transport or sell our products in international markets.

Business interruptions could keep us from developing our products and increasing our sales.

Natural or man-made disasters, such as fires, earthquakes, hurricanes, power losses, telecommunications failures, terrorist attacks, military operations and other events beyond our control may interrupt our operations. We do not have a detailed disaster recovery plan. In addition, we may not carry sufficient business interruption insurance to compensate us for losses that may occur and any losses or damages we incur could have a material adverse effect on our cash flows and success as an overall business.

We are dependent on several key customers.

In 2005, there were two customers that accounted for approximately 10% each of net sales. In 2004, there were no customers that accounted for greater than 10% of net sales. There were three customers in 2005 whose trade receivable balances equaled or exceeded 5% of total receivables, representing approximately 16%, 7%, and 6%, respectively, of total accounts receivable. During the nine-months ended September 30, 2006 there was one customer that accounted for approximately 9.4% of net sales. During the nine-months ended September 30, 2005, there were two customers that accounted for approximately 10.3% and 9.4%, respectively, of net sales. There were two customers as of September 30, 2006, whose trade receivable balances equaled or exceeded 5% of total receivables, representing approximately 15.3% and 6.8%, respectively, of total accounts receivable. The loss of business from one or a combination of our significant customers and/or the failure to collect the accounts receivable attributable to one or more of our significant customers could adversely affect our business, results of operations and financial condition.

Risks Related to Our Common Stock

Securities of Biotechnology companies are often volatile.

The trading prices of biotechnology company stocks in general tend to experience extreme price fluctuations. The valuations of many biotechnology companies without consistent product sales and earnings are extraordinarily high based on conventional valuation standards such as price to earnings and price to sales ratios. These trading prices and valuations may not be sustained. Any negative change in the public's perception of the prospects of biotechnology companies could depress our stock price regardless of our results of operations.

Other broad market and industry factors may decrease the trading price of our common stock, regardless of our performance. Market fluctuations, as well as general political and economic conditions such as war, recession or interest rate or currency rate fluctuations, also may decrease the trading price of our common stock. In addition, our stock price could be subject to wide fluctuations in response to factors including, but not limited to, the following:

- announcements of new technological innovations or new products by us or our competitors;
- changes in financial estimates by securities analysts;
- conditions or trends in the biotechnology industry;
- changes in the market valuations of other biotechnology companies;
- developments in domestic and international governmental policy or regulations;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;
- developments in patent or other proprietary rights held by us or by others;
- loss or expiration of our intellectual property rights;
- lawsuits initiated by or against us;
- period-to-period fluctuations in our operating results;
- future royalties from product sales, if any, by our strategic partners; and
- sales of our common stock or other securities in the open market.

In the past, stockholders have often instituted securities class action litigation after periods of volatility in the market price of a company's securities. If a stockholder files a securities class action suit against us, we would incur substantial legal fees and our management's attention and resources would be diverted from operating our business to respond to the litigation.

Our operating results and the market price of stock could be volatile.

Our quarterly operating results have fluctuated in the past and are likely to do so in the future. These fluctuations could cause our stock price to fluctuate significantly or decline. Some of the factors which could cause our operating results to fluctuate include:

- expiration of research contracts with collaborators, which may not be renewed or replaced;
- the success rate of our discovery efforts leading to milestones and royalties;
- the timing and willingness of collaborators to commercialize our products which would result in royalties;
- general and industry specific economic conditions, which may affect our collaborators' R&D expenditures;
- the adoption and acceptance of our industrial enzymes and other products by customers of our Enzyme Business;
- the adoption and acceptance of our C1 Host Technology, C1 Expression System and C1 Screening System by biotechnology and pharmaceutical companies being marketed by our BioSciences Business;
- the introduction by our competitors of new industrial enzyme products or lower prices of existing products to our Enzyme Business's customers;

- the addition or loss of one or more collaborative partners to commercialize our Biorefinery Products;
- the introduction by our competitors of new expression technologies competitive with our C1 Expression System; and
- disruption in our manufacturing capacity or our failure to bring on additional manufacturing capacity required to meet our projected growth.

A large portion of our expenses are relatively fixed, including expenses for facilities, equipment and personnel. Accordingly, if sales decline or do not grow as anticipated due to expiration of research contracts or government research grants, if any, failure to obtain new contracts or other factors, we may not be able to correspondingly reduce our operating expenses. Failure to achieve anticipated levels of sales could, therefore, significantly harm our operating results for a particular fiscal period.

Due to the possibility of fluctuations in our revenues and expenses, we believe that quarter-to-quarter comparisons of our operating results are not a good indication of our future performance. Our operating results in some quarters may not meet the expectations of stock market analysts and investors. In that case, our stock price would probably decline.

We may not be able to maintain our American Stock Exchange listing

Our common stock has been listed on the American Stock Exchange since May 27, 2005. There is no assurance that we will be able to satisfy the American Stock Exchange's continued listing standards, which include, among others, minimum stockholders' equity, market capitalization, pre-tax income and per share sales price. If our common stock is de-listed from the American Stock Exchange, we would be forced to list our common stock on the OTC Bulletin Board or some other quotation medium, depending on our ability to meet the specific requirements of those quotation systems. Selling our common stock would be more difficult because smaller quantities of shares would likely be bought and sold and transactions could be delayed. These factors could result in lower prices and larger spreads in the bid and ask prices for shares of our common stock. If this happens, we will have greater difficulty accessing the capital markets to raise any additional necessary capital.

We do not expect to pay dividends in the future.

We have never paid cash dividends on our stock and do not anticipate paying cash dividends on our stock in the foreseeable future. The payment of dividends on our shares, if ever, will depend on our earnings, financial condition and other business and economic factors affecting us at such time as the board of directors may consider relevant. If we do not pay dividends, our stock may be less valuable because a return on investment will only occur if and to the extent that our stock price appreciates, and if the price of our stock does not appreciate, then there will be no return on investment.

Our anti-takeover defense provisions may deter potential acquirers and depress our stock price.

Certain provisions of our certificate of incorporation, bylaws and Delaware law, as well as certain agreements we have with our executives, could be used by our incumbent management to make it substantially more difficult for a third party to acquire control of us. These provisions include the following:

- we may issue preferred stock with rights senior to those of our common stock;
- we have a classified Board of Directors;
- action by written consent by stockholders is not permitted;
- our Board of Directors has the exclusive right to fill vacancies and set the number of directors;
- cumulative voting by our stockholders is not allowed; and
- we require advance notice for nomination of directors by our stockholders and for stockholder proposals.

These provisions may discourage certain types of transactions involving an actual or potential change in control. These provisions may also limit our stockholders' ability to approve transactions that they may deem to be in their best interests and discourage transactions in which our stockholders might otherwise receive a premium for their shares over the then current market price.

We have controlling stockholders.

Our officers, directors and principal stockholders together control approximately 36.5% of our outstanding common stock as of December 12, 2006. Our founder and chief executive officer, Mark Emalfarb, through a trust of which he is the trustee and beneficiary, the Mark A. Emalfarb Trust, owns approximately 20% of our outstanding common stock as of December 12, 2006. Further, the Francisco Trust, whose beneficiaries are the spouse and descendants of Mark Emalfarb, owns approximately 16% of our outstanding common stock as of December 12, 2006, while friends and relatives of Mr. Emalfarb, who are not officers, directors, or principal stockholders, own approximately an additional 5% of our outstanding common stock as of December 12, 2006. As a result, these stockholders, if they act together, will be able to exert a significant degree of influence over our management and affairs and over matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions. In addition, this concentration of ownership may delay or prevent a change in control of us and might affect the market price of our shares, even when a change may be in the best interests of all stockholders. Moreover, the interests of this concentration of ownership may not always coincide with our interests or the interests of other stockholders, and, accordingly, they could cause us to enter into transactions or agreements which we would not otherwise consider.

We are indebted to our largest stockholders.

As of September 30, 2006, we owed the Mark A. Emalfarb Trust indebtedness of approximately $2.4 million under a bridge loan. All of our assets are mortgaged or pledged to secure the bridge loan owed to the Mark A. Emalfarb Trust. If we were unable to generate sufficient cash flow or otherwise obtain funds necessary to pay this indebtedness when due, we would be in default, and this debt holder would have the right to foreclose on its liens and security interests that secure the defaulted debt. Further, not only is this indebtedness evidenced by a promissory note that is transferable by its holder, but we could decide to refinance this indebtedness through similar secured borrowings from banks or other commercial lenders. Any transferee or new lender, no longer constrained by the stockholder interests of the Mark A. Emalfarb Trust, may not have the same attitude about any failure on our part to meet our binding repayment obligations as the Mark A. Emalfarb Trust might.

We are exposed to potential risks resulting from new requirements that we evaluate financial reporting controls under Section 404 of the Sarbanes-Oxley Act of 2002.

We are evaluating our internal controls in order to allow management to report on, and our independent registered public accounting firm to attest to, our internal controls over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act of 2002. We may encounter unexpected delays in implementing the requirements relating to internal controls over financial reporting, therefore, we cannot be certain about the timing of completion of our evaluation, testing and remediation actions or the impact that these activities will have on our operations since there is no precedent available by which to measure the adequacy of our compliance. We also expect to incur additional expenses and diversion of management's time as a result of performing the system and process evaluation, testing and remediation required in order to comply with the management certification and independent registered public accounting firm attestation requirements. If we are not able to timely comply with the requirements set forth in Section 404, we might be subject to sanctions or investigation by regulatory authorities. Any such action could adversely affect our business and financial results. The requirement to comply with Section 404 of the Sarbanes-Oxley Act of 2002 will become effective no earlier than for our fiscal year ending December 31, 2007.

In addition, in our system of internal controls we may rely on the internal controls of third parties. In our evaluation of our internal controls, we will consider the implication of our reliance on the internal controls of third parties. Until we have completed our evaluation, we are unable to determine the extent of our reliance on those controls, the extent and nature of the testing of those controls, and remediation actions necessary where that reliance cannot be adequately evaluated and tested.

Future sales of shares of our common stock may negatively affect our stock price.

As of December 12, 2006, there were 29,748,856 shares of our common stock outstanding. Approximately 36.5% of these shares are beneficially owned by our executive officers, directors and principal stockholders. Accordingly, our common stock has a relatively small public float.

We have previously registered for resale a substantial number of shares of our common stock, including shares underlying warrants. Beginning October 29, 2006, virtually all the shares of our common stock not previously eligible for resale pursuant to Rule 144(k) of the Securities Act became eligible for resale under Rule 144(k). In addition, this prospectus covers the resale of 5,581,484 shares of our common stock, including shares underlying warrants. The selling stockholders named in this prospectus will be permitted, subject to few limitations, to freely resell these shares of common stock. As a result of our relatively small public float, sales of substantial amounts of shares of our common stock, or even the potential for such sales, may materially and adversely affect prevailing market prices for our common stock. In addition, any adverse effect on the market price of our common stock could make it difficult for us to raise additional capital through sales of equity securities at a time and at a price that we deem appropriate.

DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

The statements contained or incorporated by reference in this prospectus that are not historical facts are forward-looking. These statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Such statements include, without limitation, our expectations regarding sales, earnings or other future financial and operating performance and liquidity, conduct and completion of clinical trials, product introductions, entry into new geographic regions, and general optimism about future operations or operating results. Some of these statements can be identified by the use of forward-looking terminology such as “prospects,” “outlook,” “believes,” “estimates,” “intends,” “may,” “will,” “should,” “anticipates,” “expects” or “plans,” or the negative or other variation of these or similar words, or by discussion of trends and conditions, strategy or risks and uncertainties.

These forward-looking expectations are based on current assumptions within the bounds of management’s knowledge of our business and operations and which management believes are reasonable. These assumptions are subject to risks and uncertainties, and actual results could differ materially from expectations because of issues and uncertainties such as those listed under the caption “Risk Factors” and elsewhere in this prospectus and in documents incorporated into this prospectus which, among others, should be considered in evaluating our future financial and operating performance. All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the cautionary statements in this prospectus. Readers are advised to consult any further disclosures we may make on related subjects in our subsequent reports filed with the SEC.

Additional information on factors that may affect our business and financial and operating results can be found in our filings with the SEC. All forward-looking statements should be considered in light of these risks and uncertainties. We assume no responsibility to update forward-looking statements made in this prospectus.

USE OF PROCEEDS

The shares of common stock being offered are solely for the accounts of the selling stockholders pursuant to their contractual registration rights. We will not receive any proceeds from the resale of the shares of the selling stockholders. However, we will receive the exercise price of the warrants when and if they are exercised to the extent so exercised for cash.

SELLING STOCKHOLDERS

The shares of common stock being offered by the selling stockholders are those issued to the selling stockholders in the private placements completed on November 8 and December 1, 2006 and those issuable to the selling stockholders upon exercise of the warrants issued in connection with the private placement completed on December 1, 2006. We are registering the shares of common stock in order to permit the selling stockholders to offer the shares for resale from time to time. Except for the ownership of the shares of common stock and the warrants, and except for Abengoa Bioenergy R&D, Inc. with whom we have a collaborative partnership as described in this prospectus under "Summary Description of Our Business—Recent Developments," none of the selling stockholders have had any position, office or other material relationship with us within the past three years. Under the terms of the securities purchase agreements we entered into with the selling stockholders in connection with the private placements, we have agreed to keep the registration statement of which this prospectus is a part effective until the earlier of the date on which the shares have been sold or can be sold publicly under Rule 144(k) of the Securities Act. We may suspend the use of the registration statement of which this prospectus is a part for a 20-day trading period for as many as two times in any 12-month period. If we default in our registration obligations, we have agreed to pay the selling stockholders liquidated damages in cash as described in this prospectus under "Summary Description of Our Business—Recent Developments."

The table below lists the selling stockholders and other information regarding the beneficial ownership of shares of our common stock by each of the selling stockholders as of December 12, 2006. Under the terms of the warrants, the selling stockholders may not exercise any of the warrants until May 31, 2007. Furthermore, under the terms of the warrants, a selling stockholder may not exercise any warrant owned by it, to the extent such exercise would cause such selling stockholder, together with its affiliates or any other persons whose beneficial ownership of our shares of common stock would be aggregated with such selling stockholder's beneficial ownership for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended, to beneficially own a number of shares of our common stock which would exceed 9.99% of our then outstanding shares of common stock following such exercise (excluding for purposes of such determination shares of common stock issuable upon exercise of the warrants which have not been exercised). Notwithstanding these limitations on exercise of the warrants, the shares issuable upon exercise of the warrants are deemed beneficially owned by the selling stockholders and reported as such in the table.

The selling stockholders may sell all, some or none of their shares in this offering. See "Plan of Distribution."

As of December 12, 2006, there were 29,748,856 shares of our common stock outstanding.

Name	Ownership Prior to the Offering		Number of Shares Offered	Ownership After the Offering	
	Shares	Percentage		Shares	Percentage
Abengoa Bioenergy R&D, Inc.(1)	2,136,752	7.2%	2,136,752	0	0
Emerson Partners(2)	96,000	*	60,000	36,000	*
Emerson Family Foundation (3)	85,000	*	60,000	25,000	*
Bear Stearns Securities Corporation FBO J. Steven Emerson IRA R/O II(4)	461,500	1.5%	300,000	161,500	*
Bear Stearns Securities Corporation FBO J. Steven Emerson Roth IRA (5)	770,000	2.6%	660,000	110,000	*
The Pinnacle Fund, L.P.(6)	2,473,557	8.3%	412,200	2,061,357	6.9%
Fort Mason Master, LP(7)	387,097	1.3%	387,097	0	0
Fort Mason Partners, LP(8)	25,103	*	25,103	0	0
T. Rowe Price Associates, Inc.(9)					
T. Rowe Price Health Sciences Fund, Inc. (10)	330,000	1.1%	330,000	0	0
T. Rowe Price Health Sciences Portfolio, Inc. (11)	2,400	*	2,400	0	0
TD Mutual Funds-TD Health Sciences Fund (12)	32,400	*	32,400	0	0
Valic Company I-Health Sciences Fund (13)	27, 360		27,360	0	0
John Hancock Trust- Health Sciences Trust (14)	36,000	*	36,000	0	0
Raytheon Company Combined DB/DC Master Trust- Health Sciences (15)	3,840		3,840	0	0
T. Rowe Price New Horizons Fund, Inc.(16)	960,000	3.2%	960,000	0	0
City of New York Deferred Compensation Plan-NYC 457/401K Small Cap Account (4137)(17)	28,200	*	28,200	0	0
T. Rowe Price New Horizons Trust (18)	19,800	*	19,800	0	0
Cowen and Company, LLC(19)	100,332	*	100,332	0	0
TOTAL			5,581,484		

* Represents ownership of less than 1%.

(1) Represents 2,136,752 shares of our common stock issued to the selling stockholder in the private placement completed on November 8, 2006, which may not be disposed of by the selling stockholder in whole or in part until November 8, 2007. Mr. Javier Salgado, President and Chief Executive Officer of the selling stockholder, has voting and investment power over the shares owned by the selling stockholder. The address of Abengoa Bioenergy R&D, Inc., a Missouri corporation, is 1400 Elbridge Payne, Suite 212, Chesterfield, Missouri 63017.

(2) Includes 50,000 shares of our common stock issued to the selling stockholder in the private placement completed on December 1, 2006 and 10,000 shares of our common stock issuable upon exercise of the warrants issued to the selling stockholder in such private placement. Mr. J. Steven Emerson, authorized trader of the selling stockholder, has voting and investment power over the shares owned by the selling stockholder. The address of Emerson Partners, a California limited partnership, is 1522 Ensley Avenue, Los Angeles, California 90024.

(3) Includes 50,000 shares of our common stock issued to the selling stockholder in the private placement completed on December 1, 2006 and 10,000 shares of our common stock issuable upon exercise of the warrants issued to the selling stockholder in such private placement. Mr. J. Steven Emerson, President of the selling stockholder, has voting and investment power over the shares owned by the selling stockholder. The address of Emerson Family Foundation, a California family foundation, is 1522 Ensley Avenue, Los Angeles, California 90024.

(4) Includes 250,000 shares of our common stock issued to the selling stockholder in the private placement completed on December 1, 2006 and 50,000 shares of our common stock issuable upon exercise of the warrants issued to the selling stockholder in such private placement. Mr. J. Steven Emerson, sole beneficiary of the selling stockholder, has voting and investment power over the shares owned by the selling stockholder. The address of Bear Stearns Securities Corporation FBO J. Steven Emerson IRA R/O II, a self directed IRA, is 1522 Ensley Avenue, Los Angeles, California 90024.

(5) Includes 550,000 shares of our common stock issued to the selling stockholder in the private placement completed on December 1, 2006 and 110,000 shares of our common stock issuable upon exercise of the warrants issued to the selling stockholder in such private placement. Mr. J. Steven Emerson, sole beneficiary of the selling stockholder, has voting and investment power over the shares owned by the selling stockholder. The address of Bear Stearns Securities Corporation FBO J. Steven Emerson Roth IRA, a self directed IRA, is 1522 Ensley Avenue, Los Angeles, California 90024.

(6) Includes 343,500 shares of our common stock issued to the selling stockholder in the private placement completed on December 1, 2006 and 68,700 shares of our common stock issuable upon exercise of the warrants issued to the selling stockholder in such private placement. Barry M. Kitt, as the sole member of the Pinnacle Fund Management, L.L.C., the general partner of Pinnacle Advisers, L.P., the general partner of the selling stockholder, has voting and investment power over the shares owned by the selling stockholder. Mr. Kitt disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein, if any. The address of The Pinnacle Fund, L.P., a Texas limited partnership, is 4965 Preston Park Boulevard, Suite 240, Plano Texas 75093.

(7) Represents 322,581 shares of our common stock issued to the selling stockholder in the private placement completed on December 1, 2006 and 64,516 shares of our common stock issuable upon exercise of the warrants issued to the selling stockholder in such private placement. Fort Mason Capital, LLC serves as the general partner of the selling stockholder and, in such capacity, exercises sole voting and investment power over the shares owned by the selling stockholder. Mr. Daniel German serves as the sole managing member of Fort Mason Capital, LLC. Fort Mason Capital, LLC and Mr. German each disclaim beneficial ownership of such shares, except to the extent of its or his pecuniary interest therein, if any. The address of Fort Mason Master, LP, a Delaware limited partnership, is 4 Embarcadero Center, Suite 2050, San Francisco, California 94111.

(8) Represents 20,919 shares of our common stock issued to the selling stockholder in the private placement completed on December 1, 2006 and 4,184 shares of our common stock issuable upon exercise of the warrants issued to the selling stockholder in such private placement. Fort Mason Capital, LLC serves as the general partner of the selling stockholder and, in such capacity, exercises sole voting and investment power over the shares owned by the selling stockholder. Mr. Daniel German serves as the sole managing member of Fort Mason Capital, LLC. Fort Mason Capital, LLC and Mr. German each disclaim beneficial ownership of such shares, except to the extent of its or his pecuniary interest therein, if any. The address of Fort Mason Partners, LP, a Delaware limited partnership, is 4 Embarcadero Center, Suite 2050, San Francisco, California 94111.

(9) T. Rowe Price Associates, Inc. (“T. Rowe Price Associates”) serves as investment adviser with power to direct investments and/or sole power to vote the shares owned by the funds and advisory clients listed under its name in the table above. For purposes of the reporting requirements of the Securities Exchange Act of 1934, T. Rowe Price Associates may be deemed to be the beneficial owner of all of the shares listed above; however, T. Rowe Price Associates expressly disclaims that it is, in fact, the beneficial owner of such securities. T. Rowe Price Associates is a wholly owned subsidiary of T. Rowe Price Group, Inc., which is a publicly traded financial services holding company.

(10) Represents 275,000 shares of our common stock issued to the selling stockholder in the private placement completed on December 1, 2006 and 55,000 shares of our common stock issuable upon exercise of the warrants issued to the selling stockholder in such private placement.

(11) Represents 2,000 shares of our common stock issued to the selling stockholder in the private placement completed on December 1, 2006 and 400 shares of our common stock issuable upon exercise of the warrants issued to the selling stockholder in such private placement.

(12) Represents 27,000 shares of our common stock issued to the selling stockholder in the private placement completed on December 1, 2006 and 5,400 shares of our common stock issuable upon exercise of the warrants issued to the selling stockholder in such private placement.

(13) Represents 22,800 shares of our common stock issued to the selling stockholder in the private placement completed on December 1, 2006 and 4,560 shares of our common stock issuable upon exercise of the warrants issued to the selling stockholder in such private placement.

(14) Represents 30,000 shares of our common stock issued to the selling stockholder in the private placement completed on December 1, 2006 and 6,000 shares of our common stock issuable upon exercise of the warrants issued to the selling stockholder in such private placement.

(15) Represents 3,200 shares of our common stock issued to the selling stockholder in the private placement completed on December 1, 2006 and 640 shares of our common stock issuable upon exercise of the warrants issued to the selling stockholder in such private placement.

(16) Represents 800,000 shares of our common stock issued to the selling stockholder in the private placement completed on December 1, 2006 and 160,000 shares of our common stock issuable upon exercise of the warrants issued to the selling stockholder in such private placement.

(17) Represents 23,500 shares of our common stock issued to the selling stockholder in the private placement completed on December 1, 2006 and 4,700 shares of our common stock issuable upon exercise of the warrants issued to the selling stockholder in such private placement.

(18) Represents 16,500 shares of our common stock issued to the selling stockholder in the private placement completed on December 1, 2006 and 3,300 shares of our common stock issuable upon exercise of the warrants issued to the selling stockholder in such private placement.

(19) Represents 100,332 shares of our common stock issuable upon the exercise of the warrants issued to the selling stockholder for serving as sole placement agent in the private placement completed on December 1, 2006. Cowen and Company, LLC is a wholly-owned subsidiary of Cowen Group, Inc., which is quoted on the NASDAQ under the symbol “COWN.” The address of Cowen and Company, LLC is 1221 Avenue of the Americas, New York, NY 10020.

PLAN OF DISTRIBUTION

We are registering the shares on behalf of the selling stockholders. As used in this prospectus, the term "selling stockholders" includes the pledgees, donees, transferees or other successors-in-interest selling shares received after the date of this prospectus from a named selling stockholder as a gift, pledge, partnership distribution or other non-sale related transfer.

The selling stockholders may, from time to time, sell any or all of their shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These sales may be at fixed or negotiated prices. The selling stockholders may use any one or more of the following methods when selling shares:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The selling stockholders may also sell shares under Rule 144 under the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the selling stockholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholders (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated. The selling stockholders do not expect these commissions and discounts to exceed what is customary in the types of transactions involved. Any profits on the resale of shares of common stock by a broker-dealer acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. Discounts, concessions, commissions and similar selling expenses, if any, attributable to the sale of shares will be borne by a selling stockholder. The selling stockholders may agree to indemnify any agent, dealer or broker-dealer that participates in transactions involving sales of the shares if liabilities are imposed on that person under the Securities Act.

The selling stockholders may from time to time pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock from time to time under this prospectus after we have filed a supplement to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act of 1933 supplementing or amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus.

The selling stockholders also may transfer the shares of common stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus and may sell the shares of common stock from time to time under this prospectus after we have filed a supplement to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act of 1933 supplementing or amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus.

The selling stockholders and any broker-dealers or agents that are involved in selling the shares of common stock may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the shares of common stock purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act.

We are required to pay all fees and expenses incident to the registration of the shares of common stock. We have agreed to indemnify the selling stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

The selling stockholders have advised us that they have not entered into any agreements, understandings or arrangements with any underwriters or broker-dealers regarding the sale of their shares of common stock, nor is there an underwriter or coordinating broker acting in connection with a proposed sale of shares of common stock by any selling stockholder. If we are notified by any selling stockholder that any material arrangement has been entered into with a broker-dealer for the sale of shares of common stock, if required, we will file a supplement to this prospectus. If the selling stockholders use this prospectus for any sale of the shares of common stock, they will be subject to the prospectus delivery requirements of the Securities Act.

The anti-manipulation rules of Regulation M under the Securities Exchange Act of 1934 may apply to sales of our common stock and activities of the selling stockholders.

LEGAL MATTERS

The validity of the shares of our common stock offered under this prospectus will be passed upon for us by Greenberg Traurig, P.A., Miami, Florida, of which an attorney currently beneficially owns in the aggregate 102,056 shares of our common stock.

EXPERTS

The consolidated financial statements of Dyadic International, Inc. appearing in Dyadic International, Inc.'s Annual Report (Form 10-KSB) for the year ended December 31, 2005 have been audited by Ernst & Young LLP, an independent registered public accounting firm, as set forth in their report thereon included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report, given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. The reports, proxy statements and other information filed by us may be inspected without charge at the public reference room of the SEC, which is located at 100 F Street, N.E., Washington, D.C. 20549. You may obtain copies of all or any part of the reports, proxy statements and other information from the public reference room, upon the payment of the prescribed fees. You may obtain information on the operation of the public reference room by calling the SEC at 1-800-SEC-0330. The SEC maintains a website at www.sec.gov that contains reports, proxy statements and other information regarding registrants like us that file electronically with the SEC. You can inspect the reports, proxy statements and other information on this website. You may also find information about us at our website: www.Dyadic-Group.com. The contents of our website are not part of this prospectus and our Internet address is included in this prospectus as an inactive textual reference only.

We have filed a registration statement on Form S-3 to register with the SEC the shares of our common stock offered by this prospectus. This prospectus is a part of that registration statement. As allowed by the rules of the SEC, this prospectus does not contain all of the information you can find in our registration statement or the exhibits to the registration statement. You can obtain a copy of the registration statement from the SEC at the address listed above or from the SEC's website.

You should rely only on the information contained in this prospectus or any prospectus supplement. We have not authorized anyone else to provide you with different information. The delivery of this prospectus does not, under any circumstances, mean that there has not been a change in our affairs since the date of this prospectus. It also does not mean that the information in this prospectus is correct after this date.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" certain of our publicly-filed documents in this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is considered part of this prospectus. This prospectus incorporates by reference the documents listed below.

- Our Annual Report on Form 10-KSB for the year ended December 31, 2005;
- Our Quarterly Reports on Form 10-QSB for the quarterly periods ended March 31, 2006, June 30, 2006 and September 30, 2006;
- Our definitive Proxy Statement dated April 28, 2006 relating to the 2006 annual stockholders' meeting;
- Our Current Reports on Form 8-K dated October 26, 2006 and November 17, 2006; and
- The description of our common stock filed as part of our registration statement on Form 8-A dated May 24, 2005, including any amendment or report filed for the purpose of updating such description.

All documents filed pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended (which we refer to as the "Exchange Act"), after the date of this prospectus and prior to the termination of this offering shall be deemed to be incorporated by reference in this prospectus and to be a part of this prospectus from the date they are filed. In addition, all documents filed pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of the initial registration statement and prior to the effectiveness of the registration statement of which this prospectus forms a part shall be deemed to be incorporated by reference in this prospectus and to be part of this prospectus from the date they are filed.

Any statement contained in this prospectus, or in a document incorporated by reference in this prospectus, shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus, any prospectus supplement or in any other subsequently filed document which is also incorporated in this prospectus modifies or replaces such statement. Any statements so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

You may request a copy of these documents, which will be provided to you at no cost, by writing or telephoning us using the following contact information:

Dyadic International, Inc.
140 Intracoastal Pointe Drive
Suite 404
Jupiter, Florida 33477
Attention: Investor Relations
(561) 743-8333

_____, 2007

DYADIC INTERNATIONAL, INC.

5,581,484 Shares of Common Stock

P R O S P E C T U S

We have not authorized any dealer, salesperson or other person to give you written information other than this prospectus or to make representations as to matters not stated in this prospectus. You must not rely on unauthorized information. This prospectus is not an offer to sell these securities or our solicitation of your offer to buy the securities in any jurisdiction where that would not be permitted or legal. Neither the delivery of this prospectus nor any of the sales made hereunder after the date of this prospectus shall create an implication that the information contained herein or our affairs have not changed since the date hereof.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth the estimated costs and expenses payable by the registrant in connection with the offering of the common stock. All the amounts shown are estimates except the Securities and Exchange Commission registration fee.

Securities and Exchange Commission Registration Fee	$	4,056
Legal Fees and Expenses		25,000
Accounting Fees and Expenses		30,000
Printing and Engraving Expenses		2,500
Miscellaneous		7,500
Total	$	69,056

Item 15. Indemnification of Directors and Officers.

The registrant's amended and restated certificate of incorporation provides that the Registrant shall indemnify its officers and directors in each and every situation where, under Section 145 of the Delaware General Corporate Law, as amended from time to time, or the DGCL, the registrant is permitted or empowered to make such indemnification. The registrant may, in the sole discretion of its board of directors, also indemnify any other person who may be indemnified pursuant to Section 145 to the extent the board of directors deems advisable, as permitted by Section 145.

Section 145 of the DGCL permits a corporation, under specified circumstances, to indemnify its directors, officers, employees or agents against expenses, including attorneys' fees, judgments, fines and amounts paid in settlement actually and reasonably incurred by them in connection with any action, suit or proceeding brought by third parties by reason of the fact that they were or are directors, officers, employees or agents of the corporation, if such directors, officers, employees or agents acted in good faith and in a manner they reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe their conduct was unlawful. In an action by or in the right of the corporation, indemnification may be made only for expenses actually and reasonably incurred by directors, officers, employees or agents in connection with the defense or settlement of any action or suit, and only with respect to a matter as to which they shall have acted in good faith and in a manner they reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification shall be made if such person shall have been adjudged liable to the corporation, unless and only to the extent that the court in which the action or suit was brought shall determine upon application that the defendant directors, officers, employees or agents are fairly and reasonably entitled to indemnity for such expenses despite such adjudication of liability.

The registrant's amended and restated bylaws also contain provisions requiring the registrant to indemnify its directors and officers to the fullest extent not prohibited by the DGCL or other applicable law. These bylaw provisions permit the registrant to modify the extent of such indemnification by individual contracts with its directors and officers. However, the registrant is not required to indemnify any director or officer in connection with any proceeding initiated by the person unless the indemnification is expressly required to be made by law, the proceeding was authorized by the board of directors of the registrant, the indemnification is provided by the registrant, in its sole discretion, pursuant to the powers vested in the registrant under the DGCL or any other applicable law, or the indemnification is required to be made under other provisions in the bylaws. The bylaw provisions also empower the registrant to indemnify its employees and other agents as set forth in the DGCL or other applicable law and to advance expenses to a director or officer in connection with proceedings upon receipt of an undertaking by or on behalf of the person to repay such amount if it is determined ultimately that the person is not entitled to be indemnified. The bylaw provisions generally follow the existing provisions of Section 145 of the DGCL.

The registrant maintains directors’ and officers’ liability insurance covering its directors and officers in amounts customary for similarly situated companies.

Item 16. Exhibits

Exhibit Number	Description
^ 4.1	Amended and Restated Certificate of Incorporation of Dyadic International, Inc. (3.1)
^ 4.2	Amended and Restated Bylaws of Dyadic International, Inc. (3.2)
+ 4.3	Securities Purchase Agreement dated as of October 26, 2006 by and among Dyadic International, Inc. and Abengoa Bioenergy R&D, Inc. and the purchasers listed on the signature pages thereto.
^^4.4	Securities Purchase Agreement dated as of November 17, 2006 by and among Dyadic International, Inc. and the Investors signatories thereto. (10.1)
^^4.5	Form of Warrant issued to the Investors. (10.1)
+ 4.6	Form of Warrant issued to Cowen and Company, LLC
*5.1	Opinion of Greenberg Traurig, P.A.
*23.1	Consent of Ernst & Young LLP.
*23.2	Consent of Greenberg Traurig, P.A. (contained in legal opinion filed as Exhibit 5.1).
*24.1	Powers of Attorney (included on signature pages to this registration statement).

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^ Incorporated by reference to the exhibit shown in parentheses and filed with the Current Report on Form 8-K of Dyadic International, Inc. dated October 29, 2004 and filed with the Commission on November 4, 2004.

^^ Incorporated by reference to the exhibit shown in parentheses and filed with the Current Report on Form 8-K of Dyadic International, Inc. dated November 17, 2006 and filed with the Commission on November 21, 2006.

* Filed with this Registration Statement.

+ To be filed either by amendment or as an exhibit to an Exchange Act report of Dyadic International, Inc. and incorporated herein by reference.

Item 17. Undertakings.

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, *however*, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the registration statement is on Form S-3 or Form F-3, and the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at the time shall be deemed to be the initial *bona fide* offering thereof, and

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, Dyadic International, Inc. certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Town of Jupiter, State of Florida on this 15th day of December, 2006.

Dyadic International, Inc. (Registrant)

By: /s/ Mark A. Emalfarb
Mark A. Emalfarb
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Mark A. Emalfarb and Wayne Moor his true and lawful attorneys-in-fact, each acting alone, with full powers of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any or all amendments, including any post-effective amendments, to this Registration Statement, and to file the same, with exhibits thereto, and other documents to be filed in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that said attorneys-in-fact or their substitutes, each acting alone, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Mark A. Emalfarb Mark A. Emalfarb	President and Chief Executive Officer (Principal Executive Officer) and Chairman of the Board of Directors	December 15, 2006
/s/ Wayne Moor Wayne Moor	Chief Financial Officer (Principal Financial and Accounting Officer)	December 15, 2006
/s/ Glenn E. Nedwin Glenn E. Nedwin	Director	December 15, 2006
/s/ Richard J. Berman Richard J. Berman	Director	December 15, 2006
/s/ Harry Z. Rosengart Harry Z. Rosengart	Director	December 15, 2006
/s/ Robert B. Shapiro Robert B. Shapiro	Director	December 15, 2006
/s/ Stephen J. Warner Stephen J. Warner	Director	December 15, 2006

INDEX TO EXHIBITS

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