PRESSURE BIOSCIENCES INC
Form 10-K
March 27, 2008

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

Form 10-K

(Mark One)

x	Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 **For the fiscal year ended December 31, 2007** or
o	Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 **For the transition period from _____ to _____**

Commission file number 000-21615

PRESSURE BIOSCIENCES, INC.
(Exact Name of Registrant as Specified in its Charter)

Massachusetts	**04-2652826**
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)
14 Norfolk Avenue **South Easton, Massachusetts**	**02375**
(Address of Principal Executive Offices)	(Zip Code)
(508) 230-1828	
(Registrant's Telephone Number, Including Area Code)	

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, par value $.01 per share **Preferred Share Purchase Rights**	**The Nasdaq Stock Market, LLC**

Securities registered pursuant to Section 12(g) of the Act:

(Title of Class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes o No x

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Exchange Act. Yes o No x

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the past 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.
Yes x No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer o	Accelerated filer o
Non-accelerated filer o (Do not check if smaller reporting company)	Smaller reporting company x

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).
Yes o No x

The aggregate market value of the voting and non-voting common stock held by non-affiliates of the registrant June 29, 2007 was $8,783,302 based on the closing price of the common stock as quoted on the NASDAQ Capital Market on that date.

As of March 21, 2008, there were 2,192,175 shares of the registrant's common stock outstanding.

Documents Incorporated by Reference

N/A.

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Introductory Comment

Throughout this Annual Report on Form 10-K, the terms "we," "us," "our," "the Company" and "our company" refer to Pressu BioSciences, Inc., a Massachusetts corporation, and, unless the context indicates otherwise, also includes our wholly-owned subsidiaries.

PART I

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). In some cases, forward-looking statements are identified by terms such as "may," "will," "should," "could," "would," "expects," "plans," "anticipates," "believes," "estimates," "projects," "predicts," "potential," and s expressions intended to identify forward-looking statements. Such statements include, without limitation, statements regarding:

- our plans and expectations with respect to our pressure cycling technology (PCT) operations;
- potential growth in the market for our PCT products;
- market acceptance and the potential for commercial success of our PCT products;
- our belief that PCT provides a superior solution for sample preparation;
- the expected development and success of new product offerings;
- the potential applications for PCT;
- the expected benefits and results from our research and development efforts;
- the expected benefits and results from our collaboration program;
- our belief that we have sufficient liquidity to finance operations into early 2009;
- our expectation of obtaining additional research grants from the government in the future;
- the amount of cash necessary to operate our business;
- our ability to raise additional capital when needed;
- general economic conditions; and
- the anticipated future financial performance and business operations of our company.

These forward-looking statements are only predictions and involve known and unknown risks, uncertainties, and other factors that may cause our actual results, levels of activity, performance, or achievements to be materially different from any future results, levels of activity, performance, or achievements expressed or implied by such forward-looking statements. Also, these forward-looking statements represent our estimates and assumptions only as of the date of this Report. Except as otherwise required by law, we expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any forward-looking statement contained in the Report to reflect any change in our expectations or any change in events, conditions, or circumstances on which any of our forward-looking statements are based. Factors that could cause or contribute to differences in our future financial results include those discussed in the risk factors set forth in Part I, Item 1A of this Report as well as those discussed elsewhere in this Report. We qualify all of our forward-looking statements by these cautionary statements.

ITEM 1. BUSINESS.

Throughout this document we use the following terms; Barocycler®, PULSE®, and BioSeq®, which are registered trademarks of the Company. We also use the terms ProteoSolve™, ProteoSolve$_{LRS}$™, the Power of PCT, all of which are unregistered trademarks of the Company.

Overview

We are a life sciences company focused on the development and commercialization of a novel, enabling, platform technology called pressure cycling technology ("PCT"). PCT uses cycles of hydrostatic pressure between ambient and ultra-high levels (up to 35,000 psi and greater) to control bio-molecular interactions.

Our pressure cycling technology uses internally developed instrumentation that is capable of cycling pressure between ambient and ultra-high levels at controlled temperatures to rapidly and repeatedly control the interactions of bio-molecules. Our instrument, the Barocycler®, and our internally developed consumables product line, which includes PULSE (Pressure Used to Lyse Samples for Extraction) Tubes as well as the ProteoSolve$_{LRS}$™ kit for the detergent-free extraction of proteins from lipid-rich samples, together make up the PCT Sample Preparation System ("PCT SPS").

We hold 13 United States and 6 foreign patents covering multiple applications of PCT in the life sciences field. Our pressure cycling technology employs a unique approach that we believe has the potential for broad use in a number of established and emerging life sciences areas, including;

- sample preparation for genomic, proteomic, and small molecule studies;
- pathogen inactivation;
- protein purification;
- control of chemical (enzymatic) reactions; and
- immunodiagnostics.

In 2007, we continued to engage in activities to support the commercialization of our PCT product line within genomic and proteomic sample preparation. These activities included the following:

- *Barocycler NEP2320*. We introduced for sale the Barocycler NEP2320, a smaller, more compact version of our Barocycler NEP3229. The Barocycler NEP2320 was originally developed as a demonstration unit for our sales staff. However, we determined to offer this instrument as a separate product for sale following market feedback for a smaller instrument with similar capabilities and features as our larger Barocycler NEP3229.

- *Expanded our Consumables Product Line*. We introduced for sale our ProteoSolve$_{LRS}$ kit to expand our consumables product line. Our ProteoSolve$_{LRS}$ kit offers researchers a unique method for the safe, rapid, efficient and reproducible extraction of proteins from lipid-rich samples, including adipose and brain tissues, organelles, and membrane preparations, without the use of detergents, which can be harmful to the sample extraction process.

- *CE Mark Approval*. Our Barocycler instrumentation received CE Marking, which means that our Barocycler instruments meet the essential requirements of the relevant European health, safety and environmental protection legislation. The CE Mark is an important step toward our anticipated full-scale launch of our PCT product line in Europe during 2008.

- *Expanded Our Sales Force*. We expanded our domestic sales force from one regional sales director in the beginning of the year to seven at the end of the year. Additionally, in February 2008 we re-aligned our senior management team to support a full commercialization effort by hiring Matthew B. Potter as our Vice President of Sales and

allowing Nathan P. Lawrence Ph.D., formerly responsible for marketing and sales, to focus exclusively on marketing and collaboration support, as our Vice President of Marketing.

- *Expanded Our International Distribution Network*. We expanded our international distribution network from one long-term distribution partnership at the beginning of the year to three long-term partnerships at the end of the year. As of December 31, 2007 our distribution relationships covered Japan, France, Belgium, Switzerland and South Korea.

Since we began operations as Pressure BioSciences in February 2005, we have installed 33 Barocycler instruments, including 20 instruments in 2007, 8 instruments in 2006, and 5 instruments in 2005. Our customers include researchers at academic laboratories, government agencies and biotechnology, pharmaceutical and other life sciences companies in the United States, and three foreign distribution partners.

Corporate Information

We were incorporated in the Commonwealth of Massachusetts in August 1978 as Boston Biomedica, Inc. In September 2004, we completed the sale of the Boston Biomedica core business units and began to focus exclusively on the development and commercialization of pressure cycling technology. Following this change in business strategy, we changed our legal name from Boston Biomedica, Inc. to Pressure BioSciences, Inc., or PBI, and commenced operations as Pressure BioSciences in February 2005.

Available Information

Our Internet website address is http://www.pressurebiosciences.com. Through our website, we make available, free of charge, our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to those reports, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission ("SEC"). These SEC reports can be accessed through the investor relations section of our website. The information found on our website is not part of this or any other report we file with or furnish to the SEC.

You may read and copy any materials we file with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet website that contains reports, proxy and information statements, and other information regarding Pressure BioSciences and other issuers that file electronically with the SEC. The SEC's Internet website address is http://www.sec.gov.

Sample Preparation for Genomic, Proteomic, and Small Molecule Studies

The Market

Since February 2005, we have focused substantially all of our research and development and commercialization efforts on sample preparation for genomic, proteomic, and small molecule studies. This market is comprised of academic and government research institutions, biotechnology and pharmaceutical companies, and other public and private laboratories that are engaged in studying genomic, proteomic and small molecule material within plant and animal cells and tissues.

We elected to initially focus our resources in the market of genomic, proteomic, and small molecule sample preparation because we believe it is an area that:

- is a rapidly growing market;
- has a large and immediate need for better technology;
- is comprised mostly of research laboratories, which are subject to minimal governmental regulation;
- is the least technically challenging application for the development of our products;

- is compatible with our technical core competency; and
- is the area in which we currently have strong patent protection.

We believe that our existing Barocycler instrumentation fills an important and growing need in the sample preparation market for the safe, rapid, versatile, reproducible, and quality extraction of nucleic acids, proteins, and small molecules from a wide variety of plant and animal cells and tissues. We continue to invest a significant amount of our engineering resources toward the continued improvement of our existing instruments and the development of future instrumentation.

Sample Extraction Process

The process of preparing samples for genomic, proteomic, and small molecule studies includes a crucial step called sample extraction, or sample disruption. This is the process of extracting nucleic acid ("DNA" and/or "RNA"), proteins, or small molecules from the plant or animal cells and tissues that are being studied. Sample preparation is widely regarded as a significant impediment to research and discovery, and sample extraction is generally regarded as the key part of sample preparation. Our current commercialization efforts are based upon our belief that pressure cycling technology provides a superior solution to sample extraction compared to other available technologies or procedures, and can thus significantly improve sample preparation.

Collaboration Program

Our collaboration program is an important element of our business strategy. Initiating a collaboration with a researcher usually involves the installation of a Barocycler instrument for an agreed upon period of time, generally three to six months, and the execution of an agreed upon work plan. Our primary objectives for entering into a collaboration agreement include:

- the development of a new application for PCT in sample preparation;
- the advancement and validation of our understanding of PCT within an area of the life sciences in which we have already have products;
- the demonstration of effectiveness and impact of PCT to specific research scientists whom we believe can have a positive impact on market acceptance of PCT; and
- the expectation of peer-reviewed publications and/or presentations at scientific meetings by a third party on the merits of PCT.

Since we initiated our collaboration program in June 2005, we have placed Barocycler instruments in approximately twenty sites, resulting in thirty publications and presentations by third party researchers. We believe that this program has provided, and continues to provide us with independent and objective data about PCT from well respected laboratories throughout the United States. Below is a list of selected publications and presentations that have been made by various researchers based on their experiences with PCT:

Investigator	Institution	Title	Venue/Journal	Venue Type	Date
Nikhil Patel	Bascom Palmer Eye Institute, University of Miami	Strategies to recover proteins from ocular tissues for proteomics	Proteomics	Journal Article	March 5, 2008
Mourad Ferhat	Universite de Lyon	Application of Pressure Cycling Technology to RNA Extraction from *Legionella Pneumophila* Cells	Meeting of the French Association on Legionella	Poster	October 18-19, 2007
Patricia Okubara	USDA ARS	Improved extraction of *Rhizoctonia* and *Pythium* DNA from wheat roots and soil samples using	Canadian Journal of Plant Pathology	Journal Article	September 2007

		pressure cycling technology			
Paul Pevsner	Department of Pharmacology, New York University School of Medicine	Colon Cancer: Protein Biomarkers in Tissue and Body Fluids	BMSS 29th Annual Meeting, Heriot- Watt University, Edinburgh	Poster	September 9th – 12th, 2007
Valerie S. Calvert	George Mason University	A Systems Biology Approach to the Pathogenesis of Obesity-related Nonalcoholic Fatty Liver Disease Using Reverse Phase Protein Microarrays for Multiplexed Cell Signaling Analysis	Hepatology	Journal Article	June 27, 2007
Louis S. Tisa	University of New Hampshire, Department of Microbiology	Pressure Cycling Technology (PCT) Facilitates Analysis of the Frankia Proteome	U.S. Hupo 2007	Poster	March 4-8, 2007
Frank A. Witzmann	Indiana University Medical School, Department of Cellular and Integrative Physiology	Applications of Pressure Cycling Technology (PCT) to Tissue Sample Preparation for One-and Two-Dimensional Gel Electrophoresis.	Electrophoresis	Journal Article	February 15, 2007
Rita Wong	DermTech International	Analysis of RNA Recovery and Gene Expression in the Epidermis Using Non-invasive Tape Stripping	Journal of Dermotological Science	Journal Article	November 2006
D. Alan Kerr	University of Louisville	Pressure Cycling Technology and Its Application in Steroid Receptor Extraction	Journal of Clinical Ligand Assay	Journal Article	Spring 2004

Company Products

Our PCT products have been developed to allow researchers to harness *the Power of PCT* to improve scientific research studies in the life sciences field. All of our products are developed with the expectation of meeting the needs of scientific personnel while enhancing the safety, speed, and quality that is available to them with existing sample preparation technology.

Barocycler Instrumentation

Our Barocycler product line consists of laboratory instrumentation that subjects a sample to cycles of pressure from ambient to ultra-high levels and then back to ambient, all in a precisely controlled manner. Our instruments, the Barocycler NEP3229 and Barocycler NEP2320, use cycles of high hydrostatic pressure to quickly and efficiently break up the cellular structures of a specimen releasing nucleic acids, proteins and small molecules from the specimen in our consumable tube, referred to as our PULSE tubes. Our Barocycler instrumentation is designed to fit on a laboratory bench top, inside a biological safety cabinet, or on the shelf of a cold room of a laboratory. Our instruments have an external chiller hook-up (to control temperature during the PCT process), automatic fill and dispensing valves, and an integrated micro-processor keypad. The microprocessor is capable of saving up to 99 specific PCT protocols, so the researcher can achieve maximum reproducibility for the extraction of genomic, proteomic, or small molecules from various biological samples. Our Barocycler instruments, together with our consumable products described below, make up our current PCT sample preparation system.

Barocycler NEP3229 – The Barocycler NEP3229 contains two units, an upper, user interface and a lower, power source, comprised primarily of a 1.5 horsepower motor and pump assembly. Combined, the two components of the NEP3229 weigh approximately 350 pounds. The Barocycler NEP3229 is capable of processing up to three samples simultaneously using our specially designed, single-use PULSE Tubes.

Barocycler NEP2320 – The Barocycler NEP2320 is a smaller and more compact version of our NEP3229 unit. It weighs approximately 75 pounds, processes one sample at a time, and works on compressed air (pneumatic) and not hydraulics like the larger NEP3229 unit. Because this instrument is pneumatic, the NEP2320 can be easily attached by an air hose to a typical 85 psi air compressor found in most scientific laboratories, to many consumer-sold portable compressors, or even to bottled gas. This instrument is currently being used by our sales force as a demonstration instrument and is being marketed as a second instrument alternative to our PCT Sample Preparation System.

Consumable Products

PULSE Tubes (FT500) – Our current PULSE Tube, the FT500, is a specially-designed, plastic, single-use, processing container with two chambers separated by a small disk with about sixty small holes. This small disk is referred to as a Lysis Disk. PULSE Tubes transmit the power of PCT from the Barocycler instrument to the sample. In sample extraction, the specimen is placed on the Lysis Disk, the PULSE Tube is placed in the pressure chamber of the Barocycler instrument, pressure chamber fluid is added, and pressurization begins. As pressure increases, a small moveable piston (the Ram) pushes the specimen from the top (sample) chamber, through the Lysis Disk and into the bottom (fluid retention) chamber. When pressure is released, the sample (now partially homogenized) is pulled back through the Lysis Disk by the receding Ram. The combination of physical passage through the Lysis Disk, rapid pressure changes, and other biophysical mechanisms related to cycled pressure break up the cellular structures of the specimen to quickly and efficiently release nucleic acids, proteins, and small molecules.

ProteoSolve$_{LRS}$ – (ProteoSolve for Lipid Rich Samples) is a PCT-dependent method for the safe, rapid, efficient, and reproducible extraction of proteins from lipid-rich samples, including adipose and brain tissues, organelles, and membrane preparations. Proteomic analysis of these types of samples is widely used in the study of diabetes, cancer, ALS, heart disease, and a number of other serious human disorders related to obesity. We believe that this PCT-dependent method of protein extraction from lipid-rich samples offers significant advantages over current extraction techniques, primarily due to the ability to use certain organic solvents instead of harsh detergents in the extraction process. Harsh detergents are known to compromise the integrity of many proteins; therefore the use of these detergents requires a very careful and time consuming removal process. The kit includes 12 specially-designed PULSE Tubes, certain organic solvents, other reagents, and an instruction sheet on how to utilize this patent-pending process to enhance the extraction of proteins from lipid-rich samples.

We believe our discovery of this PCT-dependent, detergent-free process, and the subsequent development of the ProteoSolve$_{LRS}$ kit, is an example of how our significant investment in research and development can result in the development of important applications of PCT in a large and important area of the life sciences.

Company Services

Government Grants – We view federal agency grants to be an important part of our business plan. These types of grants allow us to bill the federal agency for work that we are planning to perform as part of the development of our technology, and we expect that such work will support our commercialization efforts. Additionally, if our work in SBIR Phase I grants is successful, then we expect to apply for larger NIH SBIR Phase II grants. Such larger grants are typically in excess of $750,000 and can support significant research projects in areas we would expect to support with internal funds should SBIR Phase II grants not be awarded. To date we have been awarded two National Institutes of Health ("NIH") Small Business Innovation Research ("SBIR") Phase I Grants. The first grant was awarded in September 2006 to fund experiments to demonstrate the feasibility of using pressure cycling technology in the development of a new method for the extraction of clinically important protein biomarkers, sub-cellular molecular complexes, and organelles from cells and tissues. Our second NIH SBIR Phase I grant was awarded in March 2007, to fund the investigation of the purification of nucleic acids using PCT. The amount awarded under each of these grants was approximately $150,000.

Extended Service Contracts - We offer extended service contracts on our laboratory instrumentation to all of our customers. These service contracts allow a customer who purchases a Barocycler instrument to receive on-site scheduled preventative maintenance, on-site repair and replacement of all worn or defective component parts, and telephone support, all at no incremental cost, for the life of the service contract. We have offered one-year and four-year extended service contracts to customers who purchase Barocycler instruments.

Fee-for-Service – We will occasionally perform PCT services on a fee-for-service basis. We may enter into these types of arrangements if we believe that the customer has a high likelihood of purchasing a PCT Sample Preparation System or if we believe that the customer will publish or present results of the work performed in scientific journals or in scientific meetings.

Other Applications of Pressure Cycling Technology

PCT is an enabling, platform technology based on a bio-physical process that had not previously been used to control bio-molecular interactions. During its early development, under the legacy business of Boston Biomedica, Inc., our scientists were researching and developing applications of pressure cycling technology in many areas of the life sciences, including genomic, proteomic, and small molecule sample preparation. The data generated during these early years, combined with the data generated since PBI began significant operations in February 2005, form the basis of knowledge that we believe will allow us to successfully commercialize PCT both within and outside of the sample preparation market.

Our research and development efforts have shown that, in addition to genomic, proteomic and small molecule sample preparation, PCT is potentially beneficial in a number of other areas of the life sciences, including pathogen inactivation, protein purification, control of chemical (particularly enzymatic) reactions, and immunodiagnostics. Our pursuit of these markets, however, depends on a number of factors, including our success in commercializing PCT in the area of sample preparation, our judgment regarding the investment required to be successful in these areas, and the value of these markets to our company. Below is a brief explanation of each of these additional potential applications and a short description of why we believe PCT can be used to improve scientific studies in these areas.

Pathogen Inactivation

Biological products manufactured for human use, such as blood, vaccines, and drugs, are put through rigorous processing protocols in an effort to minimize the potential of that product to transmit disease. These protocols may include methods to remove infectious materials (such as pre-processing testing, filtration, or chromatography), or methods to inactivate infectious materials that are not captured in the removal steps (such as pasteurization,

irradiation, and solvent detergent inactivation). Notwithstanding current diligence in both the removal and inactivation steps, significant concern remains that some bacteria and viruses capable of transmitting infection to recipients may not be removed or inactivated with current procedures. In addition, some removal and inactivation methods may not be useful because of cost, safety, ease-of-use, or other practical concerns. To that end, we believe that a new inactivation method is needed that can safely, rapidly and inexpensively inactivate pathogens in blood, vaccines, and drugs without the need for chemical or other potentially toxic additives. We believe we have successfully generated proof-of-concept that PCT can satisfy this need. We believe that compared to current procedures, a process that uses PCT has the potential to increase safety and yield, lower cost, and decrease the potential side effects of current methods. We have been issued US, European, and Japanese patents for this PCT-dependent inactivation technology.

Protein Purification

Many vaccines and drugs are comprised of proteins. These proteins need to be purified from complex mixtures as part of the manufacturing process. Current purification techniques often result in the loss of a significant amount of the protein, therefore, any method that could increase the amount of protein being recovered in the purification step, would subsequently lead to a reduction in cost to the manufacturer. We believe we have successfully generated proof-of-concept that PCT can satisfy this need. We believe that compared to current purification procedures, a process that uses PCT has the potential to increase protein recovery, increase the quality of the product, and lower production costs. We have been issued US and European patents in this area.

Control of Chemical (Particularly Enzymatic) Reactions

Chemical reactions encompass many important interactions in nature. Methods used to control chemical reactions could have a positive effect on the quality, speed, and overall result of the reaction. The control and detection of chemical reactions is particularly useful in the biotechnology field for synthesizing and characterizing such molecules as nucleic acids and polypeptides. We believe that PCT offers distinct advantages in controlling chemical reactions over current methods, since PCT can provide precise, automated control over the timing and synchronization of chemical reactions, particularly enzymatic reactions. We have been issued US and European patents in this area.

Immunodiagnostics

Many tests used in the clinical laboratory today are based on the formation of a complex between two proteins, such as an antigen and an antibody. Such “immunodiagnostic” methods are used for the detection of infectious agents (such as HIV, hepatitis viruses, and West Nile virus), as well as for endocrine, drug testing, and cancer diagnostics. We have generated proof-of-concept that PCT may be used to control bio-molecular interactions between proteins, such as antigens and antibodies. We believe this capability may provide a greater degree of sensitivity and quantitative accuracy in immunodiagnostic testing than that offered by methods that are available today. We have been issued US and European patents in this area.

Customers

Our customers include researchers at academic laboratories, government agencies, biotechnology, pharmaceutical, and other life science companies in the United States. Our customers also include three foreign distribution partners that we have entered into agreements with over the past 12 months. During 2007, we sold limited quantities of PCT products to all of these customer groups. Our goal in 2008 is to continue our market penetration in these target groups, and to increase our commercial operations to serve researchers at these types of institutions on a global basis. We also feel that there is a significant opportunity to sell additional Barocycler instrumentation to additional laboratories at current customer institutions.

If we are successful in commercializing PCT in applications beyond our current focus area of genomic, proteomic, and small molecule sample preparation, our potential customer base could expand to include hospitals, reference laboratories, blood banks and transfusion centers, plasma collection centers, pharmaceutical manufacturing plants, and other sites involved in each specific application.

Competition

We compete with companies that have existing technologies for the extraction of nucleic acids, proteins, and small molecules from “hard-to-lyse” cells and tissues, including methods such as mortar and pestle grinding, sonication, rotor-stator homogenization, French Press, bead beating, freezer milling, enzymatic digestion, and chemical dissolution. We believe that there are a number of significant issues related to the use of these methods, including:

complexity, sample containment, cross-contamination, shearing of bio-molecules of interest, limited applicability to different sample types, ease-of-use, reproducibility, and cost. We believe that the PCT Sample Preparation System offers a number of significant advantages over these methods, including labor reduction, temperature control, precision, reproducibility, versatility, efficiency, simplicity, and safety. To compete, we must be able to clearly and conclusively demonstrate to potential customers that our products provide these improved performance capabilities.

We believe that our PCT Sample Preparation System is a novel and enabling system for genomic, proteomic and small molecule sample preparation. As such, many users of current manual techniques will need to be willing to challenge their existing methods of sample preparation and invest time to evaluate a method that could change their overall workflow in the sample preparation process, prior to adopting our technology. We are also aware that the cost of the PCT Sample Preparation System may be greater than the cost of many of the other techniques currently employed. Consequently, we are focusing our sales efforts on those product attributes that we believe will be most important and appealing to potential customers, namely versatility, reproducibility, quality, and safety.

PCT Compared to Existing Technologies

There are several incumbent technologies that offer scientists varying degrees of success in sample preparation. For several years, PBI scientists have been performing comparative studies with hundreds of samples to better understand how pressure cycling technology compares with these competitive technologies. Depending on the area of research and the type of material a scientist may be working with, there is a different level of importance placed on each attribute. Below is an illustration of how pressure cycling technology, in our opinion, compares to several existing technologies across the key attributes that we have assessed (with a "-"denoting a negative attribute, and a "+" denoting a positive attribute).

		Incumbent Technologies					
Key Attributes		Sonication	Bead Beating	Tissue Homogenizer	Mortar Pestle	French Press	**PCT**
Safety	Closed System	-	+	-	-	-	+
	Storage, Transport	-	+	-	-	-	+
Versatility		-	-	-	-	-	+
Reproducibility		-	-	-	-	-	+
Efficiency		-	-/+	-	-	-	+
Shearing Molecules		Yes	Yes	Yes	Min	Yes	**Min**

Relationship with Source Scientific, LLC

In June 2004, we transferred certain assets and liabilities of our PBI Source Scientific, Inc. subsidiary to a newly formed limited liability company known as Source Scientific, LLC. At the time of the transfer, we owned 100% of the ownership interests of Source Scientific, LLC. We subsequently sold 70% of our ownership interests of Source Scientific, LLC to Mr. Richard Henson and Mr. Bruce A. Sargeant pursuant to a purchase agreement (the "Source Scientific Agreement"). As a result of the sale of 70% of our ownership interests, Mr. Henson and Mr. Sargeant each owned 35% and we owned the remaining 30% of Source Scientific, LLC. Under the Source Scientific Agreement, we received notes receivable in the aggregate amount of $900,000 (the "Notes") payable at the end of three years bearing 8% interest. The Source Scientific Agreement offered Mr. Henson and Mr. Sargeant the option ("the Option") to purchase our 30% ownership interest in Source Scientific, LLC until May 31, 2007, at an escalating premium (10-50%) over our initial ownership value, provided that they first paid off the Notes in their entirety.

On May 29, 2007, we executed a consent agreement with Mr. Henson and Mr. Sargeant, Source Scientific LLC, and BIT Analytical Instruments, Inc. ("the Consent Agreement") pursuant to which the Notes were repaid in full in the aggregate amount of $1,201,534 in principal and interest, and Mr. Henson and Mr. Sargeant exercised their Option through BIT Analytical Instruments, Inc. to purchase our remaining 30% ownership interest in Source Scientific, LLC for an aggregate price of $578,573. As a result of these transactions, we no longer retain any direct or indirect ownership interest in Source Scientific, LLC.

The execution of these transactions, and receipt of the funds, triggered our recognition of a gain on the sale of assets related to discontinued operations of $1,534,476, net of income taxes of $218,060, during the three months ended June 30, 2007.

Manufacturing and Supply

Source Scientific, LLC, currently provides all of the manufacturing and assembly services for our instrumentation products. We plan to continue to utilize Source Scientific, LLC as our primary assembler and contract manufacturer of our current, and future, Barocycler instruments. During 2007, however, we initiated several engineering initiatives to position us for greater independence from any one supplier, and we are in the process of developing a network of manufacturers and sub-contractors to reduce our reliance on any single supplier. Until we develop a broader network of manufacturers and subcontractors, obtaining alternative sources of supply or manufacturing services could involve significant delays and other costs and challenges, and may not be available to us on reasonable terms, if at all. The failure of a supplier or contract manufacturer to provide sufficient quantities, acceptable quality and timely products at an acceptable price, or an interruption of supplies from such a supplier could harm our business and prospects.

Research and Development

Our research and development activities are split into two functional areas, applications and engineering.

Applications Research and Development

Our highly educated, experienced, and trained staff has years of experience in molecular and cellular biology, virology, and proteomics. This team focuses on the development of PCT-dependent genomic, proteomic, and small molecule sample preparation methods that we believe will result in an immediate commercial return-on-investment. To help ensure the success of this objective, Dr. Alex Lazarev our Vice President of Research & Development and his team meet regularly with our sales, marketing, and engineering departments to discuss market needs and trends. Our applications research and development staff is responsible for the technical review of all scientific collaborations, for the support of our marketing and sales departments through the generation of internal data in a number of areas of market interest, and in the development of commercially-viable PCT-dependent products. The discovery and subsequent development of ProteoSolve$_{LRS}$ is an example of how our investment in applications research and development has expanded the potential commercialization of PCT.

Engineering Research and Development

Our engineering research and development team is focused on the design and development of new and improved instrumentation and consumable products to support the commercialization of PCT. Our engineering department is led by Dr. Edmund Ting, our Senior Vice President of Engineering, and is supported by a full-time senior engineer and third parties. Over the past year, the majority of this department's efforts have been directed towards the development of additional features and benefits for the NEP3229, on the development of the NEP2320, and on the design of additional consumables for the PCT Sample Preparation System. Dr. Ting and his team have also begun the design of a Barocycler that can achieve pressures of approximately 87,000 psi, (useful for both sample preparation and inactivation), a Barocycler with minimal features and benefits that we believe will fill the need for a very basic, low cost, "mass market" type instrument, as well as a Barocycler that is small, portable, and robust enough to take out into the field. Future instrumentation could also include larger, more sophisticated, high-throughput, fully-automated instruments that could process several thousand samples per day.

In addition to instrumentation, we believe there is significant market demand for PCT-dependent consumable products that are designed to process samples smaller, and larger, than the samples that can be processed by our current PULSE Tubes. Additionally, we are investing research and development resources toward the development of application

specific PULSE Tubes with the intention of offering added convenience for our customer base, as well as expanding the application of PCT into other areas of life sciences.

Our research and development expenses were approximately $2.0 million and $1.4 million for the years ended December 31, 2007 and 2006, respectively.

Sales and Marketing

Our sales and marketing efforts are centered on using the independent data developed and disseminated by our collaboration partners to help drive the installed base of PCT Sample Preparation Systems. The development of scientific data by our partners and our internal researchers provides our sales and marketing staff with additional tools that are essential in selling a new technology such as PCT.

Sales

Direct US Sales Force

Our domestic sales force is led by our newly hired Vice President of Sales, Matthew B. Potter. Mr. Potter is responsible for directing the efforts of our seven full-time sales directors, each of whom is responsible for covering a specific region of the United States. We hired and trained six of these regional sales directors during 2007, primarily in the final four months of the year. We believe that hiring seasoned sales professionals, with at least 10 - 15 years of industry experience, will allow us to more effectively penetrate the market with a small, focused sales force. Throughout 2008, we plan to monitor this strategy and may increase the number of sales professionals if our resources permit and we believe that doing so will accelerate our commercialization efforts.

Foreign Distributor Network

We have a distribution agreement with Veritas Corporation ("Veritas") of Tokyo, Japan pursuant to which we granted Veritas exclusive distribution rights to all of our products in Japan. The term of this agreement expired on December 31, 2007, however we are currently operating under the terms of the agreement as we negotiate a three year extension.

In December 2007, we signed a distribution agreement with Disruptive Technologies ("DT") of Villecresnes, France pursuant to which we granted DT exclusive distribution rights to all of our products in France, Belgium, and Switzerland. The agreement is effective from January 1, 2008 through December 31, 2010.

In September 2007, we signed a distribution agreement with CM Corporation ("CM"), of Seoul, South Korea pursuant to which we granted CM exclusive distribution rights to all of our products in South Korea. The agreement is effective from September 1, 2007 through August 31, 2010.

Marketing

Our marketing team includes our Vice President of Marketing and a marketing associate. Our marketing department oversees and directs marketing activities such as trade show attendance and sponsorship, on-line advertising, website maintenance and improvement, search engine optimization, creation and dissemination of a PCT newsletter, market research initiatives, and the arrangement of on-location seminars, lectures, and demonstrations of PCT capabilities. Our marketing team is also responsible for the overall coordination of our collaboration programs, from initial set-up, research plan design, and training, service, and data analysis. Some of these responsibilities are shared with other PBI departments (such as R&D), but marketing drives the collaborative process.

Intellectual Property

We believe that protection of our patents and other intellectual property is essential to our business. Our practice is to file patent applications to protect technology, inventions, and improvements to inventions that are important to our business development. We also rely on trade secrets, know-how, and technological innovations to develop and maintain our potential competitive position. To date, we have been granted thirteen United States patents, three European patents, one Australian patent, one Japanese patent, and one Canadian patent. Our issued patents expire

between 2015 and 2027. Our failure to obtain adequate patent protection may adversely affect our ability to enter into, or affect the terms of, any arrangement for the marketing or sale of any of our PCT products. It may also allow our competitors to duplicate our products without our permission and without compensation.

License Agreements Relating to Pressure Cycling Technology

In 1996, we acquired our initial equity interest in BioSeq, Inc., which at the time was developing our original pressure cycling technology. BioSeq, Inc. acquired its pressure cycling technology from BioMolecular Assays, Inc. under a technology transfer and patent assignment agreement. In 1998, we purchased all of the remaining outstanding capital stock of BioSeq, Inc., and at such time, the technology transfer and patent assignment agreement was amended to require us to pay BioMolecular Assays, Inc. a 5% royalty on our sales of products or services that incorporate or utilize the original pressure cycling technology that BioSeq, Inc. acquired from BioMolecular Assays, Inc. We are also required to pay BioMolecular Assays, Inc. 5% of the proceeds from any sale, transfer or license of all or any portion of the original pressure cycling technology. These payment obligations terminate in 2016. During the fiscal years ended December 31, 2007 and 2006, we paid BioMolecular Assays, Inc. $19,596 and $9,809 in royalties.

In connection with our acquisition of BioSeq, Inc., we licensed certain limited rights to the original pressure cycling technology back to BioMolecular Assays, Inc. This license is non-exclusive and limits the use of the original pressure cycling technology by BioMolecular Assays, Inc. solely for molecular applications in scientific research and development and in scientific plant research and development. BioMolecular Assays, Inc. is required to pay us a royalty equal to 20% of any license or other fees and royalties, but not including research support and similar payments, it receives in connection with any sale, assignment, license or other transfer of any rights granted to BioMolecular Assays, Inc. under the license. BioMolecular Assays, Inc. must pay us these royalties until the expiration of the patents held by BioSeq, Inc. in 1998, which we anticipate will be 2016. We have not received any royalty payments from BioMolecular Assays, Inc. under this license.

Regulation

Many of our activities are subject to regulation by governmental authorities within the United States and similar bodies outside of the United States. The regulatory authorities may govern the collection, testing, manufacturing, safety, efficacy, labeling, storage, record keeping, transportation, approval, advertising, and promotion of our products, as well as the training of our employees.

All of our commercialization efforts to date are focused in the area of genomic, proteomic, and small molecule sample preparation. We do not believe that our current Barocycler products used in sample preparation are considered “medical devices” under the United States Food, Drug and Cosmetic Act (the “Act”) and we do not believe that we are subject to the law’s general control provisions that include requirements for registration, listing of devices, quality regulations, labeling, and prohibitions against misbranding and adulteration. Nor do we believe that we are subject to regulatory inspection and scrutiny. If, however, we are successful in commercializing PCT in applications beyond our current focus area of genomic, proteomic, and small molecule sample preparation, such as protein purification, pathogen inactivation and immunodiagnostics, our products may be considered “medical devices” under the Act, at which point we would be subject to the law’s general control provisions and regulation by the U.S. Food and Drug Administration (the “FDA”) that include requirements for registration listing of devices, quality regulations, labeling, and prohibitions against misbranding and adulteration. The process of obtaining approval to market these devices in the other potential applications of PCT would be costly and time consuming and could prohibit us from pursuing such markets.

We may also become subject to the European Pressure Equipment Directive, which requires certain pressure equipment meet certain quality and safety standards. We do not believe that we are currently subject to this directive because our Barocycler instruments are below the threshold documented in the text of the directive. If our interpretation were to be challenged, we could incur significant costs defending the challenge, and we could face production and selling delays, all of which could harm our business.

Our Barocycler instrumentation received CE Marking, which means that our Barocycler instruments meet the essential requirements of the relevant European health, safety and environmental protection legislation. The CE Mark is an important step toward our anticipated full-scale launch of our PCT product line in Europe during 2008. In order to maintain our CE Marking, a requirement to sell equipment in many countries of the European Union, we are obligated to uphold certain safety and quality standards.

Employees

As of March 24, 2008 we had 27 full-time employees.

Our 27 employees include 11 employees in the sales and marketing and technical support functions, four in general and administrative, 10 in applications research and development, and two in engineering research and development.

ITEM 1A. RISK FACTORS

This report contains forward-looking statements that involve risks and uncertainties, such as statements of our objectives, expectations and intentions. The cautionary statements made in this report should be read as applicable to all forward-looking statements wherever they appear in this report. Our actual results could differ materially from those discussed herein. Factors that could cause or contribute to such differences include those discussed below, as well as those discussed elsewhere in this report.

We will require additional capital to further develop our pressure cycling technology products and services and cannot ensure that additional capital will be available on acceptable terms or at all.

We have experienced negative cash flows from operations from our pressure cycling technology business since its inception. As of December 31, 2007, we had available cash of approximately $5.4 million. Based on our current projections, we believe our current cash resources are sufficient to fund our normal operations into early 2009.

We will need additional capital sooner than we currently expect if we experience unforeseen costs or expenses, unanticipated liabilities or delays in implementing our business plan, developing our products and achieving commercial sales. We also believe that we will need substantial capital to accelerate the growth and development of our pressure cycling technology products and services in the sample preparation area, as well as for applications in other areas of life sciences. Our capital requirements will depend on many factors, including but not limited to:

- the problems, delays, expenses, and complications frequently encountered by early-stage companies;
- market acceptance of our pressure cycling technology products and services for sample preparation;
- the success of our sales and marketing programs; and
- changes in economic, regulatory or competitive conditions in the markets we intend to serve.

To satisfy our potential capital requirements to cover the cost of the development and commercialization of our pressure cycling technology products and services relating to sample preparation and other life science applications, we expect to raise additional funds in the public or private capital markets. Additional financing may not be available to us on a timely basis, if at all, or on terms acceptable to us. If adequate funds are not available or if we fail to obtain acceptable additional financing, we may be required to:

- obtain financing with terms that may have the effect of diluting or adversely affecting the holdings or the rights of the holders of our common stock;
- obtain funds through arrangements with future collaboration partners or others that may require us to relinquish rights to some or all of our technologies or products; or
- otherwise reduce planned expenditures and forego other business opportunities, which could harm our business.

We have a history of operating losses, anticipate future losses and may never be profitable.

We have experienced significant operating losses in the area of pressure cycling technology in each period since we began investing resources in pressure cycling technology in 1998. These losses have resulted principally from research and development, sales and marketing, and general and administrative expenses associated with the development of our pressure cycling technology business. We expect to continue to incur operating losses until sales of our pressure cycling technology products increase substantially. We cannot be certain when, if ever, we will become profitable. Even if we were to become profitable, we might not be able to sustain such profitability on a quarterly or annual basis.

Our financial results depend on revenues from our pressure cycling technology products and services, which has a limited operating history.

We currently rely on revenues from our pressure cycling technology products and services in the sample preparation area. We only recently commercialized our pressure cycling technology products and services for sample preparation. Our limited sales and operating history may not be adequate to enable you to fully assess our ability to achieve market acceptance of our product offering. If we are unable to increase sales of our pressure cycling technology products and services, our business will fail.

Our business may be harmed if we encounter problems, delays, expenses, and complications that affect early-stage companies.

We are an early-stage company and our pressure cycling technology business has a limited operating history. Early-stage companies may encounter problems, delays, expenses and complications, many of which may be beyond our control or may harm our business or prospects. These include:

- unanticipated problems and costs relating to the development, testing, production, marketing, and sale of our products;
- delays and costs associated with our ability to attract and retain key personnel;
- availability of adequate financing; and
- competition.

We cannot guarantee that we will successfully complete the transition from an early-stage company to the commercialization of our pressure cycling technology products and services.

We may be unable to obtain market acceptance of our pressure cycling technology products and services.

Many of our initial sales of our pressure cycling technology products and services have been to our collaborators, following their use of our products in studies undertaken in sample preparation for genomics, proteomics and small molecules studies. Our technology requires scientists and researchers to adopt a method of sample extraction that is different than existing techniques. Our PCT sample preparation system is also more costly than existing techniques. Our ability to obtain market acceptance will depend, in part, on our ability to demonstrate to our potential customers that the benefits and advantages of our technology outweigh the increased cost of our technology compared to existing methods of sample extraction. If we are unable to demonstrate the benefits and advantages of our products and technology as compared to existing technologies, then we may not gain market acceptance and our business will fail.

The sales cycle of our pressure cycling technology products is lengthy. We have incurred and may continue to incur significant expenses and we may not generate any significant revenue related to those products.

Many of our current and potential customers have required between three and six months, or more to test and evaluate our pressure cycling technology products. This increases the possibility that a customer may decide to cancel its order or otherwise change its plans, which could reduce or eliminate our sales to that potential customer. As a result of this lengthy sales cycle, we have incurred and may continue to incur significant research and development, selling and marketing, and general and administrative expense related to customers from whom we have not yet generated any revenue from our products, and from whom we may never generate the anticipated revenue if a customer cancels or changes its plans.

Our business could be harmed if our products contain undetected errors or defects.

We are continuously developing new, and improving our existing, pressure cycling technology products in sample preparation and we expect to do so in other areas of life sciences depending upon the availability of our resources. Newly introduced products can contain undetected errors or defects. In addition, these products may not meet their performance specifications under all conditions or for all applications. If, despite internal testing and testing by our collaborators, any of our products contain errors or defects or fail to meet customer specifications, then we may be required to enhance or improve those products or technologies. We may not be able to do so on a timely basis, if at all, and may only be able to do so at considerable expense. In addition, any significant reliability problems could result in adverse customer reaction, negative publicity or legal claims and could harm our business and prospects.

Our success may depend on our ability to manage growth effectively.

We expect our operations to grow at a rapid pace as we further commercialize our pressure cycling technology in sample preparation and other areas of life sciences. Our failure to manage growth effectively could harm our business and prospects. Given our limited resources and personnel, growth of the business could place significant strain on our management, information technology systems, sources of manufacturing capacity and other resources. To properly manage our growth, we may need to hire additional employees and identify new sources of manufacturing capabilities. Failure to effectively manage our growth could make it difficult to manufacture our products and fill orders, as well as lead to declines in product quality or increased costs, any of which would adversely impact our business and results of operations.

Our success is substantially dependent on the continued service of our senior management.

Our success is substantially dependent on the continued service of our senior management. We do not have long-term employment agreements with our key employees. The loss of the services of any of these individuals could make it more difficult to successfully operate our business and achieve our business goals. In addition, our failure to retain existing engineering, research and development and sales personnel could harm our product development capabilities and customer and employee relationships, delay the growth of sales of our products and could result in the loss of key information, expertise or know-how.

We may not be able to hire or retain the number of qualified personnel, particularly engineering personnel, required for our business, which would harm the development and sales of our products and limit our ability to grow.

Competition in our industry for senior management, technical, sales, marketing, finance and other key personnel is intense. If we are unable to retain our existing personnel, or attract and train additional qualified personnel, our growth may be limited. Our success also depends in particular on our ability to identify, hire, train and retain qualified engineering personnel with experience in design and development of laboratory equipment.

Our reliance on a single third party for all of our manufacturing, and certain of our engineering, and other related services could harm our business.

We currently rely on Source Scientific, LLC, a third party contract manufacturer, to manufacture our products, provide engineering expertise, and manage the majority of our sub-contractor supplier relationships. Because of our dependence on one manufacturer, our success will depend, in part, on the ability of Source Scientific to manufacture our products cost effectively, in sufficient quantities to meet our customer demand, if and when such demand occurs, and meeting our quality requirements. If Source Scientific experiences manufacturing problems or delays, or if Source Scientific decides not to continue to provide us with these services, our business may be harmed. While we believe other contract manufacturers are available to address our manufacturing and engineering needs, if we find it necessary to replace Source Scientific, there will be a disruption in our business and we would incur additional costs and delays that would harm our business.

Our failure to manage current or future alliances or joint ventures effectively may harm our business.

We have entered into business relationships with distribution partners, and we may enter into alliances, joint ventures or other business relationships to further develop our pressure cycling technology product line. We may not be able to:

- identify appropriate candidates for alliances, joint ventures or other business relationships;
- assure that any candidate for an alliance, joint venture or business relationship will provide us with the support anticipated;
- successfully negotiate an alliance, joint venture or business relationship on terms that are advantageous to us; or
- successfully manage any alliance or joint venture.

Furthermore, any alliance, joint venture or other business relationship may divert management time and resources. Entering into a disadvantageous alliance, joint venture or business relationship, failing to manage an alliance, joint venture or business relationship effectively, or failing to comply with any obligations in connection therewith, could harm our business and prospects.

We may not be successful in growing our international sales.

We cannot guarantee that we will successfully develop our international sales channels to enable us to generate significant revenue from international sales. To date, we have entered into three international distribution agreements, one of which covers Belgium, France, and Switzerland, another covering Japan, and the third which covers South Korea. We have generated limited sales to date from international sales and cannot guarantee that we will be able to increase our sales. As we expand, our international operations may be subject to numerous risks and challenges, including:

- multiple, conflicting and changing governmental laws and regulations, including those that regulate high pressure equipment;
- reduced protection for intellectual property rights in some countries;
- protectionist laws and business practices that favor local companies;

- political and economic changes and disruptions;
- export/import controls;
- tariff regulations; and
- currency fluctuations.

Our operating results are subject to quarterly variation.

Our operating results may fluctuate significantly from period to period depending on a variety of factors, including the following:

- our ability to increase our sales of our pressure cycling technology products for sample preparation on a consistent quarterly or annual basis;
- the product mix of the Barocycler instruments we install in a given period, and whether the installations are completed pursuant to sales, rental or lease arrangements, and the average selling prices that we are able to command for our products;
- our ability to manage our costs and expenses;
- our ability to continue our research and development activities without unexpected costs and expenses; and
- our ability to comply with state and federal regulations without incurring unexpected costs and expenses.

Our instrumentation operates at high pressures and may therefore become subject to certain regulation in the European Community. Regulation of high pressure equipment may limit or hinder our development and sale of future instrumentation.

Our Barocycler instruments operate at high pressures. If our Barocycler instruments exceed certain pressure levels, our products may become subject to the European Pressure Equipment Directive, which requires certain pressure equipment meet certain quality and safety standards. We do not believe that we are subject to this directive because our Barocycler instruments are currently below the threshold documented in the text of the directive. If our interpretation were to be challenged, we could incur significant costs defending the challenge, and we could face production and selling delays, all of which could harm our business.

We expect that we will be subject to regulation in the United States, such as the FDA, and overseas as we begin to invest more resources in the development and commercialization of PCT in applications outside of sample preparation.

Our current pressure cycling technology products in the area of sample preparation are not regulated by the U.S. Food and Drug Administration, or the FDA. Applications in which we intend to develop and commercialize pressure cycling technology, such as protein purification, pathogen inactivation and immunodiagnostics, are expected to require regulatory approvals or clearances from regulatory agencies, such as the FDA, prior to commercialization. We expect that obtaining these approvals or clearances will require a significant investment of time and capital resources and there can be no assurance that such investments will receive approvals or clearances that would allow us to commercialize the technology for these applications.

If we are unable to protect our patents and other proprietary technology relating to our pressure cycling technology products, our business will be harmed.

Our ability to further develop and successfully commercialize our products will depend, in part, on our ability to enforce our patents, preserve our trade secrets, and operate without infringing the proprietary rights of third parties. We currently have thirteen United States patents issued and several pending patent applications for our pressure cycling technology. Several of these have been followed up with foreign applications, for which three patents have been issued in Europe and one patent has been issued in Australia, one in Japan, and one in Canada. We expect to file

additional foreign applications in the future relating to our pressure cycling technology, and we will file additional United States applications as we develop new patentable intellectual property. The patents which have been issued expire between 2015 and 2027.

There can be no assurance that:

- any patent applications filed by us will result in issued patents;
- patent protection will be secured for any particular technology;

- any patents that have been or may be issued to us will be valid or enforceable;
- any patents will provide meaningful protection to us;
- others will not be able to design around our patents; or
- our patents will provide a competitive advantage or have commercial value.

The failure to obtain adequate patent protection would have a material adverse effect on us and may adversely affect our ability to enter into, or affect the terms of, any arrangement for the marketing or sale of any product.

Our patents may be challenged by others.

We could incur substantial costs in patent proceedings, including interference proceedings before the United States Patent and Trademark Office, and comparable proceedings before similar agencies in other countries, in connection with any claims that may arise in the future. These proceedings could result in adverse decisions about the patentability of our inventions and products, as well as about the enforceability, validity, or scope of protection afforded by the patents.

If we are unable to maintain the confidentiality of our trade secrets and proprietary knowledge, others may develop technology and products that could prevent the successful commercialization of our products.

We also rely on trade secrets and other unpatented proprietary information in our product development activities. To the extent we rely on trade secrets and unpatented know-how to maintain our competitive technological position, there can be no assurance that others may not independently develop the same or similar technologies. We seek to protect our trade secrets and proprietary knowledge, in part, through confidentiality agreements with our employees, consultants, advisors and contractors. Nevertheless, these agreements may not effectively prevent disclosure of our confidential information and may not provide us with an adequate remedy in the event of unauthorized disclosure of such information. If our employees, consultants, advisors, or contractors develop inventions or processes independently that may be applicable to our products, disputes may arise about ownership of proprietary rights to those inventions and processes. Such inventions and processes will not necessarily become our property, but may remain the property of those persons or their employers. Protracted and costly litigation could be necessary to enforce and determine the scope of our proprietary rights. Failure to obtain or maintain trade secret protection, for any reason, could harm our business.

If we infringe on the intellectual property rights of others, our business will be harmed.

It is possible that the manufacture, use or sale of our pressure cycling technology products or services may infringe patent or other intellectual property rights of others. We may be unable to avoid infringement of the patent or other intellectual property rights of others and may be required to seek a license, defend an infringement action, or challenge the validity of the patents or other intellectual property rights in court. We may be unable to secure a license on terms and conditions acceptable to us, if at all. Also, we may not prevail in any patent or other intellectual property rights litigation. Patent or other intellectual property rights litigation is costly and time-consuming, and there can be no assurance that we will have sufficient resources to bring any possible litigation related to such infringement to a successful conclusion. If we do not obtain a license under such patents or other intellectual property rights, or if we are found liable for infringement, or if we are unsuccessful in having such patents declared invalid, we may be liable for significant monetary damages, may encounter significant delays in successfully commercializing and developing our pressure cycling technology products, or may be precluded from participating in the manufacture, use, or sale of our pressure cycling technology products or services requiring such licenses.

We may be unable to adequately respond to rapid changes in technology and the development of new industry standards.

The introduction of products and services embodying new technology and the emergence of new industry standards may render our existing pressure cycling technology products and related services obsolete and unmarketable if we are unable to adapt to change. We may be unable to allocate the funds necessary to improve our current products or introduce new products to address our customers' needs and respond to technological change. In the event that other companies develop more technologically advanced products, our competitive position relative to such companies would be harmed.

We may not be able to compete successfully with others that are developing or have developed competitive technologies and products.

A number of companies have developed, or are expected to develop, products that compete or will compete with our products. We compete with companies that have existing technologies for the extraction of nucleic acids, proteins and small molecules from cells and tissues, including methods such as mortar and pestle, sonication, rotor-stator homogenization, French press, bead beating, freezer milling, enzymatic digestion, and chemical dissolution. We are aware that there are additional companies pursuing new technologies with similar goals to the products developed or being developed by us. Some of the companies with which we now compete, or may compete in the future, have or may have more extensive research, marketing, and manufacturing capabilities, more experience in genomics and proteomics sample preparation, protein purification, pathogen inactivation, immunodiagnostics, and DNA sequencing and significantly greater technical, personnel and financial resources than we do, and may be better positioned to continue to improve their technology to compete in an evolving industry. To compete, we must be able to demonstrate to potential customers that our products provide improved performance and capabilities. Our failure to compete successfully could harm our business and prospects.

In connection with our sale of substantially all of the assets of Boston Biomedica to SeraCare Life Sciences in September 2004, we continue to be exposed to possible indemnification claims in amounts up to the purchase price for the assets, which could prevent us from pursuing our remaining business operations in the event an indemnification claim is brought against us.

In 2004 we sold substantially all of the assets of Boston Biomedica, our predecessor business, to SeraCare Life Sciences. Following the sale, we retained assets and liabilities relating to our pressure cycling technology business. In connection with the sale of assets, we agreed to provide indemnification for breaches of representations and warranties contained in the asset purchase agreement. Our indemnification obligations with respect to most matters have expired, though our obligations relating to breaches of certain representations and warranties, such as environmental and tax matters, continue to survive. Our indemnification obligations are limited by an overall cap equal to the $29 million purchase price. If we are required to pay any claims for indemnification from SeraCare Life Sciences, we will have less cash available to fund our operations, our business will be harmed and it may be difficult to continue our business at all.

Provisions in our articles of organization and bylaws and our poison pill may discourage or frustrate shareholders' attempts to remove or replace our current management.

Our articles of organization and bylaws contain provisions that may make it more difficult or discourage changes in our management that our stockholders may consider to be favorable. These provisions include:

- a classified board of directors;
- advance notice for stockholder nominations to the board of directors;
- limitations on the ability of stockholders to remove directors; and
- a provision that allows a majority of the directors to fill vacancies on the board of directors.

Our shareholders rights agreement, or "poison pill", may also have the effect of discouraging or preventing a change in control.

These provisions could prevent or frustrate attempts to make changes in our management that our stockholders consider to be beneficial and could limit the price that our stockholders might receive in the future for shares of our common stock.

The costs of compliance with the reporting obligations of the Exchange Act, and with the requirements of the Sarbanes-Oxley Act of 2002, may place a strain on our limited resources and our management's attention may be diverted from other business concerns.

As a result of the regulatory requirements applicable to public companies, we incur legal, accounting, and other expenses that are significant in relation to the size of our company. In addition, the Sarbanes-Oxley Act of 2002, as well as rules subsequently implemented by the SEC and Nasdaq, have required changes in corporate governance and financial disclosure practices of public companies, some of which are currently applicable to us and others will or may become applicable to us in the future. These rules and regulations will increase our legal and financial compliance costs and may make some activities more time-consuming. These requirements may place a strain on our systems and on our management and financial resources.

ITEM 1B. UNRESOLVED STAFF COMMENTS.

Not Applicable.

ITEM 2. PROPERTIES.

Our corporate offices are currently located at 14 Norfolk Avenue, South Easton, Massachusetts 02375. In November 2007, we signed an 18 month lease agreement commencing in February 2008 pursuant to which we lease approximately 5,500 square feet of office space, with an option for an additional 18 months. We pay approximately $6,500 per month for the use of these facilities.

On June 1, 2006, we entered into a lease agreement with Scheer Partners and the Maryland Economic Development Corporation, pursuant to which we lease laboratory and office space in Rockville, MD. In August 2007, we extended the lease agreement through May 31, 2009. We pay approximately $3,300 per month for the use of these facilities.

On March 1, 2006, we entered into a sub-lease agreement with Proteome Systems, pursuant to which we lease approximately 650 square feet of laboratory space plus 100 square feet of office space from Proteome Systems in Woburn, Massachusetts. The lease period extends through December 31, 2008 and we pay approximately $3,200 per month for the use of these facilities.

ITEM 3. LEGAL PROCEEDINGS.

We are not currently involved in any legal proceedings.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS.

None.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS, AND ISSUER PURCHASES OF EQUITY SECURITIES.

Our common stock is traded on the NASDAQ Capital Market under the trading symbol "PBIO".

The following table sets forth, for the periods indicated, the high and low sales price per share of common stock, as reported by the NASDAQ Capital Market from January 1, 2006 through December 31, 2007.

	Common Stock Price	
Fiscal Year Ended December 31, 2006	**High**	**Low**
First Quarter	$ 4.80	$ 3.67
Second Quarter	4.10	3.04
Third Quarter	3.48	2.88
Fourth Quarter	5.80	3.01

Fiscal Year Ended December 31, 2007	**High**	**Low**
First Quarter	$ 4.35	$ 3.50
Second Quarter	5.70	4.00
Third Quarter	5.00	3.67
Fourth Quarter	7.78	3.98

As of March 19, 2008, there were 20,000,000 shares of common stock authorized of which 2,192,175 shares were issued and outstanding, and held by 94 stockholders of record.

We have never declared or paid any cash dividends on our common stock and do not plan to pay any cash dividends in the foreseeable future. We intend to retain any future earnings to finance our growth.

Recent Sales of Unregistered Securities

On November 21, 2007, we completed a private placement, pursuant to which we sold an aggregate of 126,750 shares of common stock for a purchase price of $5.00 per share, resulting in gross proceeds to us of approximately $633,750 (the "Private Placement"). The shares were issued and sold to a total of 8 accredited investors pursuant to a Securities Purchase Agreement entered into as of November 21, 2007 (the "Securities Purchase Agreement").

The shares were issued in the Private Placement without registration under the Securities Act, in reliance upon the exemption from registration set forth in Rule 506 of Regulation D ("Regulation D") promulgated under the Securities Act. We based our reliance, in part, upon representations made by each purchaser of shares, including, but not limited to, representations as to the purchaser's status as an "accredited investor" (as defined in Rule 501(a) under Regulation D) and the purchaser's investment intent. The shares were not offered or sold by any form of general solicitation or general advertising; as such terms are used in Rule 502 under Regulation D. The shares cannot be offered or sold in the United States absent an effective registration statement or an exemption from the registration requirements under applicable federal and state securities laws.

In connection with the Private Placement, we filed a Registration Statement on Form S-3 (the "Registration Statement") covering the resale of the shares purchased in the Private Placement. The Registration Statement was declared effective on January 22, 2008.

Repurchases by Pressure BioSciences

We did not repurchase any of our equity securities during the fourth quarter of 2007.

Equity Compensation Plan Information

The information required by this Item 5 with respect to securities authorized for issuance under equity compensation plans is set forth in Part III, Item 12 of this Form 10-K.

ITEM 6. SELECTED FINANCIAL DATA.

Not Applicable.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATION.

OVERVIEW

We are a life sciences company focused on the development and commercialization of a novel, enabling, platform technology called pressure cycling technology ("PCT"). PCT uses cycles of hydrostatic pressure between ambient and ultra-high levels (up to 35,000 psi and greater) to control bio-molecular interactions.

Our pressure cycling technology uses internally developed instrumentation that is capable of cycling pressure between ambient and ultra-high levels at controlled temperatures to rapidly and repeatedly control the interactions of bio-molecules. Our instrument, the Barocycler®, and our internally developed consumables product line, which includes PULSE (Pressure Used to Lyse Samples for Extraction) Tubes as well as the ProteoSolve$_{LRS}$™ kit for the detergent-free extraction of proteins from lipid-rich samples, together make up the PCT Sample Preparation System ("PCT SPS").

Our pressure cycling technology employs a unique approach that we believe has the potential for broad applications in a number of established and emerging life sciences areas, including;

- sample preparation for genomic, proteomic, and small molecule studies;
- pathogen inactivation;
- protein purification;
- control of chemical (enzymatic) reactions; and
- immunodiagnostics.

Since we began operations as Pressure BioSciences in February 2005, we have focused substantially all of our research and development and commercialization efforts on sample preparation for genomic, proteomic, and small molecule studies.

Our business strategy is to commercialize pressure cycling technology in the area of sample preparation for genomic, proteomic, and small molecule studies ("sample preparation"). We also plan to pursue the further development and commercialization of PCT in other life sciences applications, which could include working with various strategic partners that have greater scientific, and regulatory, expertise in the respective applications than we do.

To support our current strategy, our primary focus in 2007 was the execution of our commercialization plan for PCT in sample preparation. We increased our spending in important areas of our business during 2007, including increased expenses associated with additional staff in the areas of sales and research and development, to support our sales expansion and increased research and development activities.

If we are successful commercializing our technology in the sample preparation market, we believe that our financial results will be positively affected by a combination of the revenue from the sale, lease, and rental of the Barocycler instruments, and by the recurring revenue streams that we hope to realize from the sale of the single-use PULSE Tubes, PCT-dependent kits (such as ProteoSolve$_{LRS}$), and extended service contracts on our instrumentation. We believe the recurring revenue streams that could be generated from our instruments in the field is a very important component of our future financial success. Therefore, we believe that in the short-term it is more important for us to focus on increasing the number of installed Barocyclers in the field than it is for us to record revenue in the current

period. To this end, we have offered our prospective customers the opportunity to lease or rent the Barocycler instruments. While these arrangements do not provide us with the immediate revenue of a sale, they do serve to expand the utilization of PCT and they provide a stream of revenue from the monthly rental income and the sale of consumable products. We define sales, leases, and rentals of Barocycler instruments as revenue-generating installations.

We also derive revenues from Small Business Innovation Research ("SBIR") grants awarded to us by the National Institutes of Health. In September 2006, and in March 2007, we received SBIR Phase I grants in the aggregate amount of $300,000. These grants have funded experiments to demonstrate the feasibility of using pressure cycling technology in various applications in the life sciences. If our work in SBIR Phase I grants is successful, then we expect to have the opportunity to apply for larger NIH SBIR Phase II grants. Additionally, if our work with the SBIR grants is successful, the publication of application notes in specific areas of research should further support our commercialization efforts.

RESULTS OF OPERATIONS

Years Ended December 31, 2007 as compared to 2006

Revenue

We had total revenue of $645,870 in the year ended December 31, 2007 as compared to $210,289 in the prior year.

Revenue from the sale of PCT products and services was $399,787 in 2007 as compared to $210,289 in 2006. This increase in revenue in 2007 was driven primarily by the installation of a total of 20 Barocycler instruments during 2007 as compared to eight in the prior year. Although the number of instruments that we installed more than doubled in 2007 as compared to 2006, the increase in revenue was not as significant. During 2006, all of the instruments installed were the higher priced NEP3229 model while during 2007 many of the instruments installed were the lower priced NEP2320 model. Additionally, in 2007 many of our installations were completed pursuant to lease or rental agreements rather than outright sales. When we install instrumentation under lease or rental agreements, we record the revenue over the life of the agreement, generally 12 months or 36 months.

We expect the number of units installed will continue to increase in future periods as we continue to commercialize our technology. We also expect that some portion of future installations will be for the smaller, lower priced, Barocycler NEP2320 model and some will be placed under lease or short-term rental agreements. Therefore, the average revenue per installation may fluctuate from period to period as we continue to drive our installed base and commercialize PCT.

During 2007, we recorded $246,083 of grant revenue. This revenue was earned in connection with our research and development efforts performed, under the two SBIR Phase I grants that we were awarded during 2006 and 2007. During 2006, we did not record any grant revenue.

Cost of PCT Products and Services

The cost of PCT products and services was $209,050 for the year ended December 31, 2007 compared to $165,233 for the comparable period in 2006. This decrease in overall cost of goods sold as a percentage of revenue is due to a number of factors. The first factor was the third quarter 2007 sale of four prototype Barocycler NEP2320 instruments. These units were prototypes and therefore the costs associated with development and assembly of these instruments were recorded as research and development expense, as such costs were incurred. The second factor that contributed to an increase in overall gross margin in 2007 relative to 2006 was a shift in the product mix to include an increasing number of consumables and the sale of several production Barocycler NEP2320 units, which have a higher gross margin than the NEP3229.

We believe that our cost of PCT Products and Services will continue to improve as a percentage of revenue as we continue to install more instrumentation, and sell more consumable products, such as PULSE Tubes and ProteoSolve$_{LRS}$ kits. However, we expect our gross margin may fluctuate from period to period as we continue to sell, lease, or rent a varying mix of Barocycler instrumentation and consumable products.

Research and Development

Research and development expenditures increased to $2,022,730 during 2007 from $1,429,711 in 2006. This increase was primarily due to a significant increase in headcount from an average of three research and development employees during 2006 to an average of 10 in 2007. Consistent with our plans to increase our research and development capabilities, the growth in our staff has allowed us to perform more experiments and provide a higher level of support to our collaboration partners, and to our newly hired sales team. We believe these efforts are important to the continued development and commercialization of PCT. Also contributing to the increase in research and development expense was the approximate $400,000 that we incurred in the development of the Barocycler NEP2320. In addition to developing a new product and a demonstration instrument for our sales force, this expenditure has resulted in the development of the core technology required to create future pneumatic (air driven) PCT instrumentation. We believe that pneumatic pressure technology will allow us to more easily and rapidly develop the smaller, portable, less expensive instruments that we believe represents an additional significant market opportunity.

Research and development expense included $141,115 and $181,609 of non-cash, stock-based compensation expense related to Statement of Financial Accounting Standards ("SFAS") 123R " *Share-Based Payment"* ("SFAS 123R") in 2007 and 2006, respectively.

We plan to reduce the level of hiring in 2008, relative to 2007. Therefore, we expect our spending in this area to increase less significantly than it has in the prior year. We believe that with our existing staff, we can continue to pursue research and development programs, and continue to invest in our intellectual property portfolio, in the sample preparation area.

Selling and Marketing

Selling and marketing expenses increased to $1,386,519 in 2007 from $528,265 for the year ended December 31, 2006. In March 2007 we announced our plans to begin active commercialization of PCT. As part of this plan, we outlined our intent to build a targeted US-based sales force. During 2007, we completed the hiring of six additional regional directors (bringing the total to seven) and continued to increase our spending in marketing, and sales support. Additionally, we shifted our technical services department into the sales and marketing function to reflect a shift in departmental responsibilities.

Selling and marketing expense included $70,770 and $44,086 of non-cash, stock-based compensation expense related to SFAS 123R in 2007 and 2006, respectively.

We expect that selling and marketing expense will continue to increase throughout 2008 in support of our commercialization efforts. We also plan to continue the expansion of our marketing programs and the further development of our foreign distribution network.

General and Administrative

General and administrative costs totaled $2,174,739 in the year ended December 31, 2007, as compared to $2,145,196 in 2006. Our general and administrative costs remained relatively flat despite an increase in spending in the areas of investor relations, Sarbanes-Oxley compliance, and legal costs associated with our intellectual property. These increases were almost entirely offset by a decrease in non-cash, stock-based compensation expense related to SFAS 123R. In 2007, our SFAS 123R general and administrative expense was $150,479; in 2006, our general and administrative SFAS 123R expense was $424,628. The decrease in general and administrative SFAS 123R expense was due to the fact that the outside members of our Board of Directors did not receive any stock options in 2007. The expense related to the stock option grants to outside members of our Board of Directors during 2006 was $313,071.

We expect general and administrative spending in 2008 to be approximately the same as it was in 2007. We will continue to incur costs in support of our investor relations programs, Sarbanes-Oxley compliance, and other costs associated with being a publicly-traded company, and some continued investment in the development of our infrastructure.

Operating Loss from Continuing Operations

The operating loss from continuing operations was $5,147,168 in 2007, as compared to $4,058,116 in the year ended December 31, 2006. The $1,089,052 increase relates primarily to an increase in spending in the research and development and selling and marketing areas of our business, in support of our development and commercialization of PCT.

Included in our operating loss was $367,110 and $660,278 of non-cash, stock-based compensation expense related to SFAS 123R in 2007 and 2006, respectively.

We expect our operating loss in 2008 to be higher than the operating loss incurred in 2007, due primarily to expected increased spending in our sales and marketing activities and, to a lesser extent, our research and development activities. We do, however, expect that the gross profit from increasing revenues will mitigate the impact of our increased spending on our overall operating loss.

Realized gain of sale on securities held for sale

During 2007, we recorded a gain on sale of securities of $2,028,720 in connection with the sale of our remaining 513,934 shares of Panacos Pharmaceuticals common stock. In 2006, we realized a gain of $517,938 in connection with the sale of 57,900 shares of Panacos Pharmaceuticals common stock. As of December 31, 2007, we no longer held any shares of Panacos Pharmaceuticals common stock.

Interest Income

Interest income totaled $286,600 for the year ended December 31, 2007, as compared to interest income of $381,713 in 2006. The prior year period included approximately $100,000 of interest income from our chief executive officer in connection with his loan payable to us. This Note was paid in full in December 2006.

Income Tax Benefit from Continuing Operations

For the year ended December 31, 2007 we recorded a benefit for income taxes from continuing operations of $520,214. Despite our history of operating losses, we recorded this benefit due to our expected ability under federal income tax law to carry back current operating losses to offset taxable income that was recorded in 2005. During 2006, we recorded a benefit for income taxes from continuing operations of $745,354.

We do not expect to record any income tax benefit for the foreseeable future due to the fact that we are no longer able to carry back current losses against taxable income from prior periods and because we expect our operating losses to continue for several years. If we are successful commercializing PCT and if we are able to generate operating income, then we may be able to utilize the net operating loss carry-forwards that we generate.

Gain on Sale of Net Assets Related to Discontinued Operations

During 2007, we realized a gain on the sale of Source Scientific, LLC of $1,155,973. This gain is comprised of the $378,503 charge that we recorded in the first quarter of 2007 under the provisions of Staff Accounting Bulletin ("SAB") Topic 5E, *"Accounting for Divestiture of a Subsidiary or Other Business Operation* ("SAB Topic 5E") and the gain of $1,534,476, net of income taxes of $218,060, that we recorded during the second quarter of 2007, the period in which we completed the sale.

We recorded this gain in connection with the receipt on May 29, 2007 of $1,780,071 from Mr. Richard W. Henson and Mr. Bruce A. Sargeant, the principals of Source Scientific, LLC, as full payment for their purchase of our remaining interest in that business. During 2006, we accounted for our investment in Source Scientific, LLC under the

provisions of SAB Topic 5E. In accordance with SAB Topic 5E, we were to record the losses of Source Scientific, LLC, to the extent they exceeded cumulative income for the year. During 2006, Source Scientific, LLC, was never in a cumulative loss position therefore we did not record any loss in connection with our interest in Source Scientific, LLC.

Net Loss

Our net loss in 2007 was $1,155,661 as compared to a net loss of $2,413,111 in 2006. This decrease in net loss was due to an increase in operating expenses of the business that was more than offset by the gain in the sale of marketable securities and the gain in the sale of assets related to discontinued operations. Without these non-recurring items, our net loss in 2007 would have exceeded that recorded in 2006.

We expect that our net loss in 2008 will be significantly higher than it was in 2007. Our expectation of an increase in net loss is based upon plans to increase operating costs relative to 2007 in our selling and marketing and, to a lesser extent, our research and development activities. Additionally, our net loss in 2008 will not be mitigated by the gain on sale of marketable securities and the gain on sale of assets related to discontinued operations, as was the case in 2007. Finally, during 2008 we do not expect to record a benefit for income taxes as we did in 2007.

LIQUIDITY AND FINANCIAL CONDITION

As of December 31, 2007, our working capital position was $5,933,822, the primary components of which were cash and cash equivalents, income tax receivable, prepaid expenses and deposits on open purchase orders for the production of Barocycler instruments, partially offset by accounts payable, accrued employee compensation, other accrued expenses, and accrued income taxes. As of December 31, 2006, our working capital position was $5,770,086, the primary components of which were cash and cash equivalents, income tax receivable, prepaid expenses and other current assets, partially offset by accounts payable, accrued employee compensation, other accrued expenses, and accrued income taxes. The prior year working capital balance excluded the $2,060,875 of investment in marketable securities, and the related deferred tax liability of $669,520, that we had classified as current.

This increase in working capital of $163,736 is due primarily to the receipt of cash proceeds from the sale of our remaining shares in Panacos Pharmaceuticals common stock, our receipt of proceeds from the sale of our ownership interest in Source Scientific, LLC and the sale of 126,750 shares of our common stock in November 2007, partially offset by our utilization of working capital to fund our operations.

We expect our working capital position to decline as we fund our operations from our cash and cash equivalents. We believe that we have sufficient liquidity to fund our operations at their current level, and with planned increases in selected areas of our business, into early 2009. The extent to which we increase our operational costs is dependent upon our judgment of the investment required to successfully commercialize PCT and our ability to secure additional funding through equity or debt financings.

Net cash used in continuing operations during 2007 was $3,896,422 as compared to net cash used in continuing operations of $2,102,976 during 2006. The cash used in operations in 2007 included our net loss, an increase in deposits on open purchase orders, inventory and accounts receivable, partially offset by a decrease in income tax receivable and an increase in accrued employee compensation. We expect net cash used in continuing operations to increase in 2008 as we increase our selling and marketing and research and development activities.

Net cash provided by investing activities during 2007 was $1,852,482 as compared to $452,854 in the prior year. The cash generated in 2007 was entirely from the sale of 513,934 shares of Panacos Pharmaceuticals common stock, partially offset by purchases of fixed assets. The cash generated in the same period in 2006 was entirely from the sale of 57,900 shares of Panacos Pharmaceuticals common stock, also partially offset by purchases of fixed assets. We expect that our investment in fixed assets will increase in 2008 as we continue to increase our staff and operating facilities.

Net cash generated from financing activities during 2007 was $571,133 and relates to the sale of 126,750 shares of our common stock to 8 non-affiliated investors pursuant to a private placement that we completed in November 2007. Net cash used in financing activities in 2006 included $323,158 to purchase 110,889 shares of our common stock from unaffiliated shareholders for an average price of $2.91 per share, partially offset by proceeds generated by the exercise of options to purchase 2,000 shares of our common stock by a Director. The stock purchase from the unaffiliated shareholders was made pursuant to the authorization of our Board of Directors in September 2006.

Net cash provided by discontinued operations during 2007 of $1,562,011 was due to the completion of the divestiture of Source Scientific, LLC. During the same period in 2006, we received cash from discontinued operations of

$886,390. This amount was due entirely to the receipt of the final escrow payment in connection with the 2004 sale of the Boston Biomedica core businesses to SeraCare Life Sciences, Inc.

CRITICAL ACCOUNTING POLICIES

Use of Estimates

To prepare our consolidated financial statements in conformity with accounting principles generally accepted in the United States of America, we are required to make significant estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. In addition, significant estimates were made in projecting future cash flows to quantify impairment of assets, deferred tax assets, the costs associated with fulfilling our warranty obligations for the instruments that we sell, and the estimates employed in our calculation of fair value of stock options awarded. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ from the estimates and assumptions used.

Revenue Recognition

We recognize revenue in accordance with the Securities and Exchange Commission's ("SEC") Staff Accounting Bulletin ("SAB") No. 104, *Revenue Recognition* ("SAB 104"). Revenue is recognized when realized or earned when all the following criteria have been met: persuasive evidence of an arrangement exists; delivery has occurred and risk of loss has passed to the customer; the seller's price to the buyer is fixed or determinable; and collectibility is reasonably assured.

Our current instruments, the Barocycler NEP3229 and NEP2320, require a basic level of instrumentation expertise to set-up for initial operation. To support a favorable first experience for our customers, we send a representative to the customer site to install every Barocycler that we sell through our domestic sales force. The installation process includes uncrating and setting up the instrument and conducting an introductory user training course. Product revenue related to current Barocycler instrumentation is recognized upon the installation of our instrumentation at the customer location. Product revenue related to sales of PCT products to our foreign distributors is recognized upon shipment through a common carrier. We provide for the expected costs of warranty upon the recognition of revenue for the sales of our instrumentation. Our sales arrangements do not provide a right of return to our customers. Product revenue related to our consumable products such as PULSE Tubes and ProteoSolve$_{LRS}$ kits is recorded upon shipment through a common carrier. Shipping costs are included in the costs of sales. Any shipping costs billed to customers are recognized as revenue.

In accordance with the Financial Accounting Standards Board ("FASB") Statement of Financial Accounting Standards ("SFAS") No. 13, *"Accounting for Leases"*, we account for our lease agreements under the operating method. We record revenue over the life of the lease term and we record depreciation expense on a straight-line basis over the thirty-six month estimated useful life of the Barocycler instrument. The depreciation expense associated with assets under lease agreement is included in the "Cost of PCT products and services" line item in our Consolidated Statements of Operations. We pay all maintenance costs associated with the instrument during the term of the leases.

Revenue from government grants is recorded when expenses are incurred under the grant in accordance with the terms of the grant award.

Our transactions sometimes involve multiple elements (i.e., products and services). Revenue under multiple element arrangements is recognized in accordance with Emerging Issues Task Force ("EITF") Issue No. 00-21, *"Accounting for Revenue Arrangements with Multiple Deliverables"*. Under this method, if an element is determined to be a separate unit of accounting, the revenue for the element is based on fair value and determined by vendor specific objective evidence ("VSOE"), and recognized at the time of delivery. If an arrangement includes undelivered elements that are not

essential to the functionality of the delivered elements, we defer the fair value of the undelivered elements with the residual revenue allocated to the delivered elements. Fair value is determined based upon the price charged when the element is sold separately. If there is not sufficient evidence of the fair value of the undelivered elements, no revenue is allocated to the delivered elements and the total consideration received is deferred until delivery of those elements for which objective and reliable evidence of the fair value is not available. We provide certain customers with extended service contracts and, to the extent VSOE is established, these service revenues are recognized ratably over the life of the contract which is generally one to four years.

Intangible Assets

We have classified as intangible assets, costs associated with the fair value of certain assets of businesses acquired. Intangible assets relate to the remaining value of acquired patents associated with PCT. The cost of these acquired patents is amortized on a straight-line basis over sixteen years. We annually review our intangible assets for impairment. When impairment is indicated, any excess of carrying value over fair value is recorded as a loss. An impairment analysis of intangible assets as of December 31, 2007 concluded they were not impaired.

Long-Lived Assets and Deferred Costs

In accordance with SFAS No. 144, *"Accounting for the Impairment or Disposal of Long-Lived Assets"*, if indicators of impairment exist, we assess the recoverability of the affected long-lived assets by determining whether the carrying value of such assets can be recovered through the undiscounted future operating cash flows related to the long-lived assets. If impairment is indicated, we measure the amount of such impairment by comparing the carrying value of the asset to the fair value of the asset and record the impairment as a reduction in the carrying value of the related asset and a charge to operating results. While our current and historical operating losses and cash flow are indicators of impairment, we performed an impairment analysis at December 31, 2007 and determined that our long-lived assets were not impaired.

RECENT ACCOUNTING STANDARDS

In September 2006, FASB issued SFAS 157, "Fair Value Measurements". SFAS No. 157 establishes a formal framework for measuring fair value under GAAP and expands on disclosure of fair value measurements. Although SFAS No. 157 applies to and amends the provisions of existing FASB and AICPA pronouncements, it does not, of itself, require any new fair value measurements, nor does it establish valuation standards. SFAS No. 157 applies to all other accounting pronouncements requiring or permitting fair value measurements, except for; SFAS No. 123R, share based payment and related pronouncements, the practicability exceptions to fair value determinations allowed by various other authoritative pronouncements, and AICPA Statements of Position 97-2 and 98-9 that deal with software revenue recognition. This statement is effective for financial statements issued for fiscal years beginning after November 15, 2007, and interim periods within those fiscal years.

In December 2007, the FASB issued SFAS 141 (revised 2007), "Business *Combinations"* ("SFAS 141(R)") and SFAS No. 160, *"Non-controlling Interests in Consolidated Financial Statements – an amendment of ARB No. 51"* ("SFAS 160").

SFAS 141(R) significantly changes the accounting for business combinations. Under SFAS 141(R), an acquiring entity will be required to recognize all the assets acquired and liabilities assumed in a transaction at the acquisition-date at fair value with limited exceptions. SFAS 141(R) further changes the accounting treatment for certain specific items, including:

- Acquisition costs will be generally expensed as incurred;

- Noncontrolling interests (formerly known as "minority interests" – see SFAS 160 discussion below) will be valued at fair value at the acquisition date;

- Acquired contingent liabilities will be recorded at fair value at the acquisition date and subsequently measured at either the higher of such amount or the amount determined under existing guidance for non-acquired contingencies;

- In-process research and development will be recorded at fair value as an indefinite-lived intangible asset at the acquisition date;

- Restructuring costs associated with a business combination will be generally expensed subsequent to the acquisition date; and

- Changes in deferred tax asset valuation allowances and income tax uncertainties after the acquisition date generally will affect income tax expense.

- SFAS 141(R) includes a substantial number of new disclosure requirements. FAS 141(R) applies prospectively to business combinations for which the acquisition date is on or after January 1, 2009.

SFAS 160 establishes new accounting and reporting standards for the non-controlling interest in a subsidiary and for the deconsolidation of a subsidiary. Specifically, this statement requires the recognition of non-controlling interests (minority interests) as equity in the consolidated financial statements and separate from the parent's equity. The amount of net income attributable to non-controlling interests will be included in consolidated net income on the face of the income statement. SFAS 160 clarifies that changes in a parent's ownership interest in a subsidiary that does not result in deconsolidation are treated as equity transactions if the parent retains its controlling financial interest. In addition, this statement requires that a parent recognize a gain or loss in net income when a subsidiary is deconsolidated. Such gain or loss will be measured using the fair value of the non-controlling equity investment on the deconsolidation date. SFAS 160 also includes expanded disclosure requirements regarding the interests of the parent and its non-controlling interest.

SFAS 160 is effective for fiscal years, and interim periods within such year, beginning January 1, 2009. Early adoption of both SFAS 141(R) and SFAS 160 is prohibited. We do not expect that either SFAS 141(R) or SFAS 160 will have a material affect on our consolidated results of operations and financial condition.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

Not Applicable

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

PRESSURE BIOSCIENCES, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
DECEMBER 31, 2007 and 2006

	2007	2006
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	$ 5,424,486	$ 5,335,282
Accounts receivable	118,471	37,495
Inventories	172,548	19,658
Deposits	553,483	175,300
Prepaid income taxes	56,863	38,687
Income tax receivable	249,541	710,013
Prepaid expenses and other current assets	94,783	71,476
Investments in marketable securities	-	2,060,875
Total current assets	6,670,175	8,448,786
PROPERTY AND EQUIPMENT, NET	257,797	207,696
OTHER ASSETS		
Intangible assets, net	328,290	376,922
Assets of discontinued operation	-	1,420,996
Total other assets	328,290	1,797,918
TOTAL ASSETS	$ 7,256,262	$ 10,454,400
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES		
Accounts payable	$ 152,729	$ 174,289
Accrued employee compensation	377,190	242,497
Accrued professional fees and other expenses	186,840	150,978
Income taxes payable	4,519	45,962
Deferred taxes	-	669,520
Deferred revenue	15,075	4,099
Total current liabilities	736,353	1,287,345
LONG TERM LIABILITIES		
Deferred revenue	6,767	9,126
Liabilities of discontinued operation	-	1,042,493
Total long term liabilities	6,767	1,051,619
TOTAL LIABILITIES	743,120	2,338,964
COMMITMENTS AND CONTINGENCIES (Note 9)		
STOCKHOLDERS' EQUITY		
Preferred stock; 1,000,000 shares authorized; 0 outstanding	-	-
Common stock, $.01 par value; 20,000,000 shares authorized; 2,192,175 and 2,065,425 shares issued and outstanding	21,922	20,654
Additional paid-in capital	6,284,616	5,347,641

Accumulated other comprehensive income		-		1,384,876
Retained earnings		206,604		1,362,265
Total stockholders' equity		6,513,142		8,115,436
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$	7,256,262	$	10,454,400

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

PRESSURE BIOSCIENCES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS
FOR THE YEARS ENDED DECEMBER 31, 2007 AND 2006

	For the Year Ended December 31,	
	2007	**2006**
REVENUE:		
PCT Products, services, other	$ 399,787	$ 210,289
Grant revenue	246,083	-
Total revenue	645,870	210,289
COSTS AND EXPENSES:		
Cost of PCT products and services	209,050	165,233
Research and development	2,022,730	1,429,711
Selling and marketing	1,386,519	528,265
General and administrative	2,174,739	2,145,196
Total operating costs and expenses	5,793,038	4,268,405
Operating loss from continuing operations	(5,147,168)	(4,058,116)
OTHER INCOME:		
Realized gain on securities available for sale	2,028,720	517,938
Interest income	286,600	381,713
Total other income	2,315,320	899,651
Loss from continuing operations before income taxes	(2,831,848)	(3,158,465)
Income tax benefit from continuing operations	520,214	745,354
Loss from continuing operations	(2,311,634)	(2,413,111)
DISCONTINUED OPERATIONS:		
Gain on sale of net assets related to discontinued operations (net of income tax of $218,060)	1,155,973	-
Net loss	$ (1,155,661)	$ (2,413,111)
Loss per share from continuing operations - basic and diluted	$ (1.11)	$ (1.01)
Income per share from discontinued operations - basic and diluted	0.55	-
Net loss per share - basic and diluted	$ (0.56)	$ (1.01)
Weighted average number of shares used to calculate income (loss) per share - basic and diluted	2,078,657	2,396,077

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

PRESSURE BIOSCIENCES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
FOR THE YEARS ENDED DECEMBER 31, 2007 AND 2006

	For the Year Ended December 31,	
	2007	**2006**
Other Comprehensive Loss		
Net loss	$ (1,155,661)	$ (2,413,111)
Holding gain	(27,479)	(1,383,417)
Reclassification of unrealized gain to realized gain on securities during the period	(2,028,720)	(517,938)
Unrealized loss on marketable securities	(2,056,199)	(1,901,355)
Income tax benefit related to items of other comprehensive loss	671,323	748,268
Total other comprehensive loss, net of taxes	(1,384,876)	(1,153,087)
Comprehensive loss	$ (2,540,537)	$ (3,566,198)

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

PRESSURE BIOSCIENCES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2007 AND 2006

	Common Stock Shares	Common Stock $.01 Par Value	Additional Paid-In Capital	Accumulated Other Comprehensive Income	Loan Receivable from Officer/ Director	Retained Earnings	Total Stockholders' Equity
BALANCE, December 31, 2005	2,424,189	$ 24,242	$ 6,027,020	$ 2,537,963	$ (1,000,000)	$ 3,775,376	$ 11,364,601
Stock options and other warrants exercised	2,000	20	5,380				5,400
Interest accrued on loan receivable from CEO/Director					(25,487)		(25,487)
Exchange of shares for payoff of loan receivable from CEO/Director	(249,875)	(2,499)	(1,022,988)		1,025,487		-
Repurchase shares via stock buy-back program	(110,889)	(1,109)	(322,049)				(323,158)
Stock-based compensation			660,278				660,278
Net loss						(2,413,111)	(2,413,111)
Unrealized loss on investments (net of tax)				(1,153,087)			(1,153,087)
BALANCE, December 31, 2006	2,065,425	$ 20,654	$ 5,347,641	$ 1,384,876	$ -	$ 1,362,265	$ 8,115,436
Issuance costs relating to private placement			(62,617)				(62,617)
Stock issued in private placement	126,750	1,268	632,482				633,750
Stock-based compensation			367,110				367,110
Net loss						(1,155,661)	(1,155,661)
Unrealized loss on investments (net of tax)				(1,384,876)			(1,384,876)
BALANCE, December 31, 2007	2,192,175	$ 21,922	$ 6,284,616	$ -	$ -	$ 206,604	$ 6,513,142

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

PRESSURE BIOSCIENCES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2007 AND 2006

	For the Year Ended December 31,	
	2007	**2006**
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$ (1,155,661)	$ (2,413,111)
Less gain on sale of discontinued operations	(1,155,973)	-
Loss from continuing operations	$ (2,311,634)	$ (2,413,111)
Adjustments to reconcile loss to net cash used in operating activities:		
Depreciation and amortization	179,446	146,256
Non-cash, stock-based compensation expense	367,110	660,278
Loss on disposal of property and equipment	-	42,781
Interest received with exchange of stock from Director/CEO	-	(25,487)
Realized gain on sale of marketable securities	(2,028,720)	(517,938)
Changes in operating assets and liabilities:		
Accounts receivable	(80,976)	21,303
Inventories	(152,890)	65,549
Deposits	(378,183)	(156,120)
Income tax receivable	460,472	(178,891)
Prepaid income taxes	(18,176)	(38,687)
Prepaid expenses and other current assets	(23,307)	(15,370)
Accounts payable	(21,560)	117,894
Accrued employee compensation	134,693	148,143
Other accrued expenses	10,129	44,966
Deferred revenue	8,617	13,225
Income taxes payable	(41,443)	(17,767)
Net cash used in operating activities from continuing operations	(3,896,422)	(2,102,976)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Additions to property and equipment	(180,915)	(65,609)
Proceeds from sale of marketable securities	2,033,397	518,463
Net cash provided by investing activities from continuing operations	1,852,482	452,854
CASH FLOWS FROM FINANCING ACTIVITIES:		
Repurchase of common stock	-	(323,158)
Proceeds from the issuance of common stock	571,133	5,400
Net cash provided by (used in) financing activities from continuing operations	571,133	(317,758)
CASH FLOWS FROM DISCONTINUED OPERATIONS:		
Operating cash flows	(218,060)	(230,915)
Cash flows from investing activities	1,780,071	1,117,305
Net cash provided by discontinued operations	1,562,011	886,390

CHANGE IN CASH AND CASH EQUIVALENTS:		89,204		(1,081,490)
Cash and cash equivalents, beginning of year		5,335,282		6,416,772
Cash and cash equivalents, end of year	$	5,424,486	$	5,335,282
SUPPLEMENTAL INFORMATION:				
Income taxes paid	$	20,800	$	230,863
Income taxes received		723,801		-

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

PRESSURE BIOSCIENCES, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
As of December 31, 2007

(1) Business Overview and Management Plans

We are a life sciences company focused on the development and commercialization of a novel, enabling, platform technology called pressure cycling technology ("PCT"). PCT uses cycles of hydrostatic pressure between ambient and ultra-high levels (up to 35,000 psi and greater) to control bio-molecular interactions.

Our pressure cycling technology uses internally developed instrumentation that is capable of cycling pressure between ambient and ultra-high levels at controlled temperatures to rapidly and repeatedly control the interactions of bio-molecules. Our instrument, the Barocycler®, and our internally developed consumables product line, which includes PULSE (Pressure Used to Lyse Samples for Extraction) Tubes as well as the ProteoSolve$_{LRS}$™ kit for the detergent-free extraction of proteins from lipid-rich samples, together make up the PCT Sample Preparation System ("PCT SPS").

We have experienced negative cash flows from operations with respect to our pressure cycling technology business since its inception. As of December 31, 2007, we had available cash of approximately $5.4 million. We believe that we have sufficient liquidity to fund our operations at their current level, and with planned increases in selected areas of our business, into early 2009. The extent to which we increase our operational costs is dependent upon our judgment of the investment required to successfully commercialize PCT and our ability to secure additional funding through equity or debt financing. If we are unable to increase the number of installations of Barocycler instruments and if we are unable to secure additional funding through equity or debt financing we will be prepared to reduce our spending. We have developed plans based on these contingencies and such reductions of spending will include the delay of certain research and development projects and the reduction of the cost of our workforce. We believe that implementing such changes to our business plan will allow us to extend our existing cash balances into the middle of 2009, without significantly impacting our short-term commercialization efforts.

(2) Summary of Significant Accounting Policies

(i) Principles of Consolidation

The consolidated financial statements include the accounts of Pressure BioSciences, Inc., and its wholly-owned subsidiary PBI BioSeq, Inc.

(ii) Use of Estimates

To prepare our consolidated financial statements in conformity with accounting principles generally accepted in the United States of America, we are required to make significant estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. In addition, significant estimates were made in projecting future cash flows to quantify impairment of assets, deferred tax assets, the costs associated with fulfilling our warranty obligations for the instruments that we sell, and the estimates employed in our calculation of fair value of stock options awarded. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ from the estimates and assumptions used.

(iii) Revenue Recognition

We recognize revenue in accordance with the Securities and Exchange Commission’s (“SEC”) Staff Accounting Bulletin (“SAB”) No. 104, *Revenue Recognition* ("SAB 104"). Revenue is recognized when realized or earned when all the following criteria have been met: persuasive evidence of an arrangement exists; delivery has occurred and risk of loss has passed to the customer; the seller’s price to the buyer is fixed or determinable; and collectibility is reasonably assured.

PRESSURE BIOSCIENCES, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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Our current instruments, the Barocycler NEP3229 and NEP2320, require a basic level of instrumentation expertise to set-up for initial operation. To support a favorable first experience for our customers, we send a representative to the customer site to install every Barocycler that we sell through our domestic sales force. The installation process includes uncrating and setting up the instrument and conducting an introductory user training course. Product revenue related to current Barocycler instrumentation is recognized upon the installation of our instrumentation at the customer location. Product revenue related to sales of PCT products to our foreign distributors is recognized upon shipment through a common carrier. We provide for the expected costs of warranty upon the recognition of revenue for the sales of our instrumentation. Our sales arrangements do not provide a right of return to our customers. Product revenue related to our consumable products such as PULSE Tubes and ProteoSolve$_{LRS}$ kits is recorded upon shipment through a common carrier. Shipping costs are included in the costs of sales. Any shipping costs billed to customers are recognized as revenue.

In accordance with the Financial Accounting Standards Board ("FASB") Statement of Financial Accounting Standards ("SFAS") No. 13, *"Accounting for Leases"*, we account for our lease agreements under the operating method. We record revenue over the life of the lease term and we record depreciation expense on a straight-line basis over the thirty-six month estimated useful life of the Barocycler instrument. The depreciation expense associated with assets under lease agreement is included in the "Cost of PCT products and services" line item in our Consolidated Statements of Operations. We pay all maintenance costs associated with the instrument during the term of the leases.

Revenue from government grants is recorded when expenses are incurred under the grant in accordance with the terms of the grant award.

Our transactions sometimes involve multiple elements (i.e., products and services). Revenue under multiple element arrangements is recognized in accordance with Emerging Issues Task Force ("EITF") Issue No. 00-21, *"Accounting for Revenue Arrangements with Multiple Deliverables"*. Under this method, if an element is determined to be a separate unit of accounting, the revenue for the element is based on fair value and determined by vendor specific objective evidence ("VSOE"), and recognized at the time of delivery. If an arrangement includes undelivered elements that are not essential to the functionality of the delivered elements, we defer the fair value of the undelivered elements with the residual revenue allocated to the delivered elements. Fair value is determined based upon the price charged when the element is sold separately. If there is not sufficient evidence of the fair value of the undelivered elements, no revenue is allocated to the delivered elements and the total consideration received is deferred until delivery of those elements for which objective and reliable evidence of the fair value is not available. We provide certain customers with extended service contracts and, to the extent VSOE is established, these service revenues are recognized ratably over the life of the contract which is generally one to four years.

(iv) Cash and Cash Equivalents

Our policy is to invest available cash in short-term, investment grade interest-bearing obligations, including money market funds, and bank and corporate debt instruments. Securities purchased with initial maturities of three months or less are valued at cost plus accrued interest, which approximates fair market value, and are classified as cash equivalents.

(v) Research and Development

Research and development costs, which are comprised of costs incurred in performing research and development activities including wages and associated employee benefits, facilities, consumable products and overhead costs that

are expensed as incurred. Our research activities are performed at our laboratories in Woburn, Massachusetts and Rockville, Maryland and in conjunction with the collaboration partner sites. In support of our research and development activities we utilize our Barocycler instruments that are capitalized as fixed assets and depreciated over their expected useful life.

PRESSURE BIOSCIENCES, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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(vi) Inventories

Inventories are valued at the lower of cost or market. The composition of inventory as of December 31, 2007 and 2006 is as follows:

	December 31,	
	2007	2006
Raw materials	$ 28,115	$ 3,158
Finished goods	144,433	16,500
Total	$ 172,548	$ 19,658

(vii) Property and Equipment

Property and equipment are stated at cost, less accumulated depreciation. For financial reporting purposes, depreciation is recognized using the straight-line method, allocating the cost of the assets over their estimated useful lives of three years for certain laboratory equipment, from three to five years for management information systems and office equipment, and three years for all PCT finished units classified as fixed assets.

(viii) Intangible Assets

We have classified as intangible assets, costs associated with the fair value of acquired intellectual property. Intangible assets including patents are being amortized on a straight-line basis over sixteen years. We perform a quarterly review of our intangible assets for impairment. When impairment is indicated, any excess of carrying value over fair value is recorded as a loss. An impairment analysis of intangible assets was performed as of December 31, 2007. Based on this analysis, we have concluded that no impairment of intangible assets had occurred.

(ix) Long-Lived Assets and Deferred Costs

In accordance with the Financial Accounting Standards Board ("FASB") Statements of Financial Accounting Standards ("SFAS") No. 144, *"Accounting for the Impairment or Disposal of Long-Lived Assets"* , if indicators of impairment exist, we assess the recoverability of the affected long-lived assets by determining whether the carrying value of such assets can be recovered through the undiscounted future operating cash flows. If impairment is indicated, we measure the amount of such impairment by comparing the carrying value of the asset to the fair value of the asset and record the impairment as a reduction in the carrying value of the related asset and a charge to operating results. While our current and historical operating losses and cash flow are indicators of impairment, we performed an impairment test at December 31, 2007 and determined that such long-lived assets were not impaired.

(x) Concentrations

Credit Risk

Our financial instruments that potentially subject us to concentrations of credit risk consist primarily of cash, cash equivalents and trade receivables. We have cash investment policies which, among other things, limit investments to investment-grade securities. We perform ongoing credit evaluations of our customers, and the risk with respect to trade receivables is further mitigated by the fact that many of our customers are government institutions and university labs.

During 2007 and 2006 our top five customers accounted for 66.4% and 80.0% of our total revenues, respectively. During 2007, various agencies of the Federal Government of the United States in the aggregate accounted for 54.8% of our total revenues.

As of December 31, 2007 and 2006 our top five accounts receivable accounted for 93.8% and 92.4% of our total receivables balance, respectively. As of December 31, 2007, various agencies of the Federal Government of the United States in the aggregate accounted for 40.8% of our total accounts receivable.

PRESSURE BIOSCIENCES, INC. AND SUBSIDIARIES
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Product Supply

Source Scientific, LLC has been our sole contract manufacturer for all of our PCT instrumentation. During 2007, however, we initiated several engineering initiatives to position us for greater independence from any one supplier, and we are in the process of developing a network of manufacturers and sub-contractors to reduce our reliance on any single supplier. Until we develop a broader network of manufacturers and subcontractors, obtaining alternative sources of supply or manufacturing services could involve significant delays and other costs and challenges, and may not be available to us on reasonable terms, if at all. The failure of a supplier or contract manufacturer to provide sufficient quantities, acceptable quality and timely products at an acceptable price, or an interruption of supplies from such a supplier could harm our business and prospects.

(xi) Computation of Loss per Share

Basic loss per share is computed by dividing loss available to common shareholders by the weighted average number of common shares outstanding. Diluted loss per share is computed by dividing loss available to common shareholders by the weighted average number of common shares outstanding plus additional common shares that would have been outstanding if dilutive potential common shares had been issued. For purposes of this calculation, stock options are considered common stock equivalents in periods in which they have a dilutive effect. Stock options that are anti-dilutive are excluded from this calculation. The following table illustrates our computation of loss per share for the years ended December 31, 2007 and 2006.

	For the Year Ended December 31,	
	2007	2006
Numerator:		
Loss from continuing operations - basic and diluted	$ (2,311,634)	$ (2,413,111)
Denominator:		
Weighted Average Shares Outstanding, basic and diluted	2,078,657	2,396,077
Loss per share from continuing operations - basic and diluted	$ (1.11)	$ (1.01)
Shares excluded from calculations	211,796	118,751

(xii) Accounting for Income Taxes

Effective January 1, 2007, we adopted the provisions of FASB Interpretation No. 48, "*Accounting for Uncertainty in Income Taxes - an Interpretation of FASB Statement No. 109"* (FIN 48). FIN 48 clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements in accordance with SFAS No. 109, *"Accounting for Income Taxes"*. This interpretation prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. FIN 48 also provides guidance on de-recognition of tax benefits, classification on the balance sheet, interest and penalties, accounting in interim periods, disclosure, and transition. We adopted FIN 48 effective January 1, 2007. FIN 48 requires significant judgment in determining what constitutes an individual tax position as well as assessing the outcome of each tax position. Changes in judgment as to recognition or measurement of tax positions can materially affect the estimate of the effective tax rate and consequently, affect our operating results. Prior to the adoption of FIN

48, we recorded liabilities related to uncertain tax positions based upon Statement of Financial Accounting Standards No. 5, “Accounting for Contingencies”.

We account for income taxes under the asset and liability method, which requires recognition of deferred tax assets, subject to valuation allowances, and liabilities for the expected future tax consequences of events that have been included in the financial statements or tax returns. Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of asset and liabilities for financial reporting and income tax purposes. A valuation allowance is established if it is more likely than not that all or a portion of the net deferred tax assets will not be realized.

PRESSURE BIOSCIENCES, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
As of December 31, 2007

(xiii) Accounting for Stock-Based Compensation

On January 1, 2006, we adopted SFAS No. 123 (revised 2004), *"Share-Based Payment"* , or SFAS 123R, and its related implementation guidance as promulgated by both the FASB, and the SEC SAB 107, associated with the accounting for stock-based compensation arrangements of our employees and directors. These pronouncements require that equity-based compensation cost be measured at the grant date (based upon an estimate of the fair value of the compensation granted) and recorded to expense over the requisite service period, which generally is the vesting period. We adopted SFAS 123R using the modified prospective method in the first quarter of 2006.

We estimate the fair value of equity-based compensation utilizing the Black-Scholes option pricing model. This model requires the input of several factors such as the expected option term, expected volatility of our stock price over the expected term, expected risk-free interest rate over the expected option term, expected dividend yield rate over the expected option term, and an estimate of expected forfeiture rates, and is subject to various assumptions. We believe this valuation methodology is appropriate for estimating the fair value of stock options granted to employees and directors which are subject to SFAS 123R requirements. These amounts are estimates and thus may not be reflective of actual future results, nor amounts ultimately realized by recipients of these grants. These amounts, and the amounts applicable to future quarters, are also subject to future quarterly adjustments based upon a variety of factors. The following table summarizes the assumptions we utilized for grants of stock options to the two sub-groups of our stock option recipients during the twelve months ended December 31, 2007 and 2006:

Assumptions	Outside Board Members	Officers & Employees
Expected life	5.0 (yrs)	6.0 (yrs)
Expected volatility	55.66% - 77.86%	55.66% - 92.53%
Risk-free interest rate	3.69% - 4.94%	3.38% - 4.94%
Forfeiture rate	5.00%	5.00%
Expected dividend yield	0.0%	0.0%

We developed the above referenced assumptions based on the following rationale. We utilized the simplified method provided by SAB No. 107 to develop our estimate of expected term of the stock options granted. Under this method, stock options granted to outside board members are estimated to have an expected term of 5 years and stock options granted to our CEO and all other officers and employees are estimated to have an expected term of 6 years. All stock options granted have a 10 year contractual life. The stock options granted to outside directors vest immediately and the stock options granted to the CEO and all other officers and employees vest ratably over three years. SAB No. 107 provides a simplified approach to developing the estimate of expected term based on the average of the midpoint of the vesting period and the contractual life. The expected volatility is assumed to approximate the historical volatility that was observed during the corresponding expected term for each sub-group of option recipients. The risk-free interest rate is a weighted average approximation based on the U.S. Treasury yields in effect at the time of the grants. We used a dividend yield of zero for the calculation because we have never paid cash dividends and we have no intention to begin paying dividends in the foreseeable future. While we believe these estimates are reasonable, the compensation expense recorded would increase if the assumed expected term was increased or a higher expected volatility was used.

We recognized stock-based compensation expense of $367,110 and $660,278 for the years ended December 31, 2007 and 2006, respectively. The following table summarizes the effect of this stock-based compensation expense within each of the line items within our Consolidated Statement of Operations:

	Year Ended December 31,	
	2007	2006
Cost of PCT products and services	$ 4,746	$ 9,955
Research and development	141,115	181,609
Selling and marketing	70,770	44,086
General and administrative	150,479	424,628
Total stock-based compensation expense	$ 367,110	$ 660,278

PRESSURE BIOSCIENCES, INC. AND SUBSIDIARIES
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The provisions of SFAS 123R require that we make an estimate of our forfeiture rate and adjust the expense that we recognize to reflect the estimated number of stock options that will go unexercised. Our historical forfeiture rate has been approximately 5%, we used this historical rate as our assumption in calculating future stock-based compensation expense.

During the years ended December 31, 2007 and 2006, the total fair value of stock options awarded was $590,912 and $1,089,400, respectively.

As of December 31, 2007, the total estimated fair value of unvested stock options to be amortized over their remaining vesting period was $688,624. The non-cash, stock based compensation expense associated with the vesting of these options will be $411,344 in 2008, $214,101 in 2009 and $63,179 in 2010.

(xiv) Fair Value of Financial Instruments

Due to their short maturities, the carrying amounts for cash and cash equivalents, accounts receivable, accounts payable, and accrued expenses approximate their fair value. Long-term liabilities are primarily related to liabilities transferred under contractual arrangements with carrying values that approximate fair value.

(xv) Reclassifications

Certain prior year amounts have been reclassified to conform to our current year presentation.

(xvi) Recent Accounting Standards

In September 2006, FASB issued SFAS 157, *"Fair Value Measurements"*. SFAS No. 157 establishes a formal framework for measuring fair value under GAAP and expands on disclosure of fair value measurements. Although SFAS No. 157 applies to and amends the provisions of existing FASB and AICPA pronouncements, it does not, of itself, require any new fair value measurements, nor does it establish valuation standards. SFAS No. 157 applies to all other accounting pronouncements requiring or permitting fair value measurements, except for: SFAS No. 123R, *"Share-Based Payment"* and related pronouncements, the practicability exceptions to fair value determinations allowed by various other authoritative pronouncements, and AICPA Statements of Position 97-2 and 98-9 that deal with software revenue recognition. This statement is effective for financial statements issued for fiscal years beginning after November 15, 2007, and interim periods within those fiscal years. We do not expect the adoption of SFAS 157 to have a material impact on our consolidated financial statements.

In December 2007, the FASB issued SFAS 141 (revised 2007), *"Business Combinations"* ("SFAS 141(R)") and SFAS No. 160, *"Non-controlling Interests in Consolidated Financial Statements – an amendment of ARB No. 51"* ("SFAS 160").

SFAS 141(R) significantly changes the accounting for business combinations. Under SFAS 141(R), an acquiring entity will be required to recognize all the assets acquired and liabilities assumed in a transaction at the acquisition-date at fair value with limited exceptions. SFAS 141(R) further changes the accounting treatment for certain specific items, including:

- Acquisition costs will be generally expensed as incurred;

- Noncontrolling interests (formerly known as “minority interests” – see SFAS 160 discussion below) will be valued at fair value at the acquisition date;

- Acquired contingent liabilities will be recorded at fair value at the acquisition date and subsequently measured at either the higher of such amount or the amount determined under existing guidance for non-acquired contingencies;

- In-process research and development will be recorded at fair value as an indefinite-lived intangible asset at the acquisition date;

PRESSURE BIOSCIENCES, INC. AND SUBSIDIARIES
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- Restructuring costs associated with a business combination will be generally expensed subsequent to the acquisition date; and

- Changes in deferred tax asset valuation allowances and income tax uncertainties after the acquisition date generally will affect income tax expense.

SFAS 141(R) includes a substantial number of new disclosure requirements. FAS 141(R) applies prospectively to business combinations for which the acquisition date is on or after January 1, 2009.

SFAS 160 establishes new accounting and reporting standards for the non-controlling interest in a subsidiary and for the deconsolidation of a subsidiary. Specifically, this statement requires the recognition of non-controlling interests (minority interests) as equity in the consolidated financial statements and separate from the parent's equity. The amount of net income attributable to non-controlling interests will be included in consolidated net income on the face of the income statement. SFAS 160 clarifies that changes in a parent's ownership interest in a subsidiary that does not result in deconsolidation are treated as equity transactions if the parent retains its controlling financial interest. In addition, this statement requires that a parent recognize a gain or loss in net income when a subsidiary is deconsolidated. Such gain or loss will be measured using the fair value of the non-controlling equity investment on the deconsolidation date. SFAS 160 also includes expanded disclosure requirements regarding the interests of the parent and its non-controlling interest.

SFAS 160 is effective for fiscal years, and interim periods within such year, beginning January 1, 2009. Early adoption of both SFAS 141(R) and SFAS 160 is prohibited. We do not expect that either SFAS 141(R) or SFAS 160 will have a material affect on our consolidated results of operations and financial condition.

(xvii) Investment in Marketable Securities

As of December 31, 2007 and 2006, we held 0 and 513,934 shares of common stock of Panacos Pharmaceuticals, Inc., respectively. During 2007 and 2006 we accounted for this investment in accordance with the provisions of SFAS 115 *"Accounting for Certain Investments in Debt and Equity Securities"* as securities available for sale. On December 31, 2006, our balance sheet reflected the fair value of our investment in Panacos Pharmaceuticals to be approximately $2.1 million, based on the closing price of Panacos Pharmaceutical shares of $4.01 per share on that day. During 2007 and 2006 the carrying value of our investment in Panacos Pharmaceuticals common stock changed from period to period based on changes in the closing price of the common stock on the NASDAQ Global Market. We recorded these changes in market value on a quarterly basis as unrealized gains and losses in Comprehensive Income or Loss.

(xviii) Advertising

Advertising costs are expensed as incurred. During 2007 and 2006 we incurred $30,572 and $0, respectively in advertising expense.

(xvix) Rent Expense

Rental costs are expensed as incurred. During 2007 and 2006 we incurred $85,555 and $86,864, respectively in rent expense for the use of our corporate office and research and development facilities.

(3) Discontinued Operations

Source Scientific, LLC

In June 2004, we transferred certain assets and liabilities of our PBI Source Scientific, Inc. subsidiary to a newly formed limited liability company known as Source Scientific, LLC. At the time of the transfer, we owned 100% of the ownership interests of Source Scientific, LLC. We subsequently sold 70% of our ownership interests of Source Scientific, LLC to Mr. Richard Henson and Mr. Bruce A. Sargeant pursuant to a purchase agreement (the "Source Scientific Agreement"). As a result of the sale of 70% of our ownership interests, Mr. Henson and Mr. Sargeant each owned 35% and we owned the remaining 30% of Source Scientific, LLC. Under the Source Scientific Agreement, we received notes receivable in the aggregate amount of $900,000 (the "Notes") payable at the end of three years bearing 8% interest. The Source Scientific Agreement offered Mr. Henson and Mr. Sargeant the option ("the Option") to purchase our 30% ownership interest in Source Scientific, LLC until May 31, 2007, at an escalating premium (10-50%) over our initial ownership value, provided that they first paid off the Notes in their entirety.

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On May 29, 2007, we executed a consent agreement with Mr. Henson and Mr. Sargeant, Source Scientific LLC, and BIT Analytical Instruments, Inc. ("the Consent Agreement") pursuant to which the Notes were repaid in full in the aggregate amount of $1,201,534 in principal and interest, and Mr. Henson and Mr. Sargeant exercised their Option through BIT Analytical Instruments, Inc. to purchase our remaining 30% ownership interest in Source Scientific, LLC for an aggregate price of $578,573. As a result of these transactions, we no longer retain any direct or indirect ownership interest in Source Scientific, LLC.

The execution of these transactions, and receipt of the funds, triggered our recognition of a gain on the sale of assets related to discontinued operations of $1,534,476, net of income taxes of $218,060, during the twelve months ended December 31, 2007.

Boston Biomedica, Inc

On September 14, 2004, we completed the sale of substantially all of the assets and selected liabilities of the BBI Diagnostics and BBI Biotech divisions of our legacy company Boston Biomedica, Inc. to SeraCare Life Sciences, Inc. Pursuant to the Asset Purchase Agreement, the businesses were sold for $30 million in cash of which $27.5 million was paid at the closing and the remaining $2.5 million was deposited in escrow pursuant to an escrow agreement expiring in March 2006. In December 2004, and again in February 2005, we settled disagreements with SeraCare Life Sciences, Inc., regarding the value of the inventory and accounts receivable in the closing balance sheets by releasing approximately $1.4 million from the escrow account. On March 15, 2006, we received approximately $1.1 million in remaining escrow funds.

(5) Property and Equipment

Property and equipment as of December 31, 2007 and 2006 consisted of the following components:

	2007	2006
Laboratory and manufacturing equipment	$ 59,361	$ 43,986
Office equipment	105,906	64,496
PCT collaboration, demonstration and leased systems	351,838	227,708
	517,105	336,190
Less accumulated depreciation	(259,308)	(128,494)
Net book value	$ 257,797	$ 207,696

Depreciation expense for the years ended December 31, 2007 and 2006 was $130,814 and $97,621, respectively.

(6) Intangible Assets

Intangible assets as of December 31, 2007 reflect an estimate of purchase price attributable to patents in connection with the 1998 acquisition of BioSeq, Inc. and the PCT business. Acquired PCT patents are being amortized to expense on a straight line basis at the rate of $48,632 per year over their estimated remaining useful life of approximately 7

years. Intangible assets at December 31, 2007 and 2006 consisted of the following:

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	2007	2006
PCT Patents	$ 778,156	$ 778,156
Less accumulated amortization	(449,866)	(401,234)
Net book value	$ 328,290	$ 376,922

Amortization expense for each of the years ended December 31, 2007 and 2006 was $48,632.

(7) Retirement Plan

We provide all of our employees with the opportunity to participate in our retirement savings plan. Our retirement savings plan has been qualified under Section 401(k) of the Internal Revenue Code. Eligible employees are permitted to contribute to the plan through payroll deductions within statutory limitations and subject to any limitations included in the plan. During 2007 and 2006 we contributed $15,708 and $9,565, respectively, in the form of discretionary company matching contributions.

(8) Income Taxes

The components of the benefit for income taxes from continuing operations are as follows:

	For the Year Ended December 31,	
	2007	2006
Current benefit: federal	$ 481,394	$ 929,961
Current benefit (provision): state	38,820	(184,607)
Total current benefit	520,214	745,354
Deferred provision: federal	-	-
Deferred provision: state	-	-
Total deferred provision	-	-
Total benefit for income taxes from continuing operations	$ 520,214	$ 745,354

Significant items making up the deferred tax assets and deferred tax liabilities as of December 31, 2007 and 2006 are as follows:

	December 31,	
	2007	2006
Current deferred taxes:		
Inventories	$ -	$ 24,512
Other accruals	82,748	31,536
Unrealized gain on marketable securities	-	(669,520)
Less: valuation allowance	(82,748)	(56,048