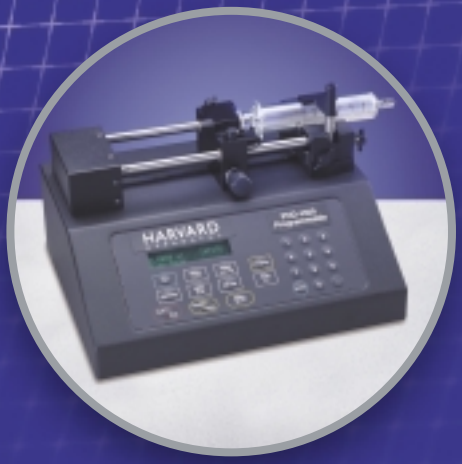
HARVARD
BIOSCIENCE



Tools to Accelerate Drug Discovery

2001 ANNUAL REPORT

It started in the basement...

Harvard Bioscience was founded in 1901. Frustrated by the poor quality of equipment then available, Dr. William T. Porter began manufacturing his own high quality physiology teaching equipment in the basement of the Harvard Medical School. Dr. Porter went on to found the American Journal of Physiology and became one of the leading physiologists of his day. His equipment gained an enviable reputation for quality and reliability and began to be known simply as the Harvard Apparatus. The name stuck. In the early 1980's the company started using the name Harvard Bioscience and in 2000 we officially changed the name of the company to Harvard Bioscience, Inc. In 1996 the current management team took over the company and expanded the product offering and improved growth and profitability. We completed our initial public offering in December 2000.

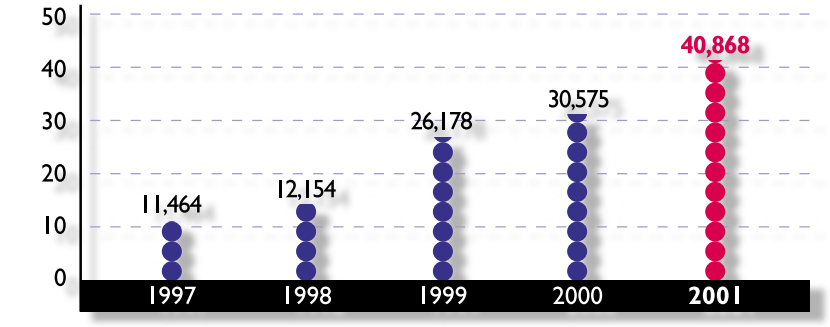
Both we and physiology have come a long way in 100 years. Today we are a leading worldwide supplier of scientific instruments used in drug discovery applications. Our products are used across a broad spectrum of both well established and cutting edge applications and are used by the world's top pharmaceutical and biotech companies.

HISTORY

FINANCIAL PERFORMANCE

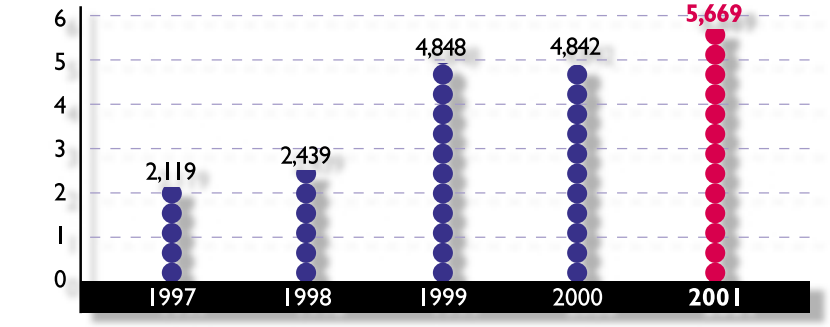
REVENUES

($US in Thousands)



PROFORMA OPERATING PROFIT

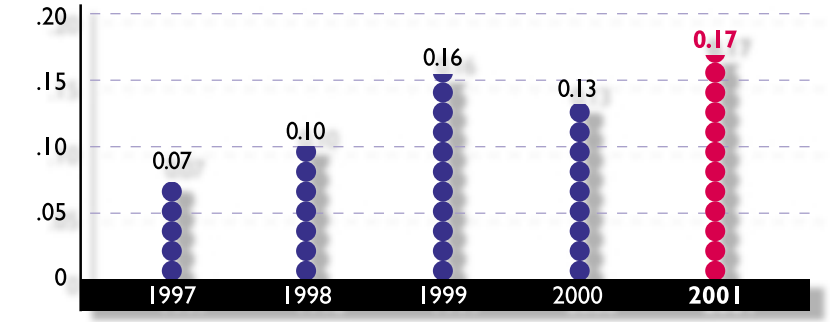
($US in Thousands)



Excludes charges for stock compensation expense, amortization of goodwill and other intangibles, acquired in-process r&d expense and severance & related costs

PROFORMA EPS

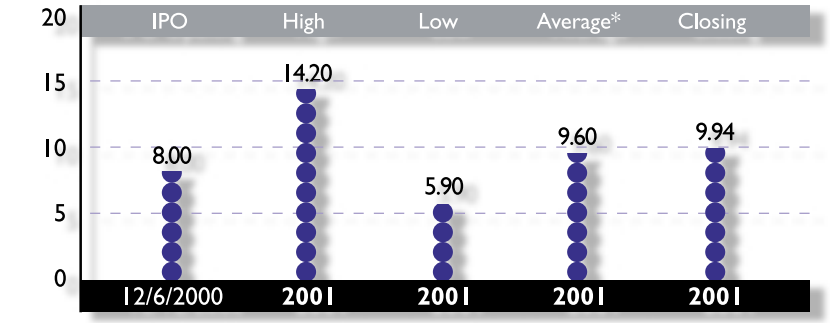
(In $US)



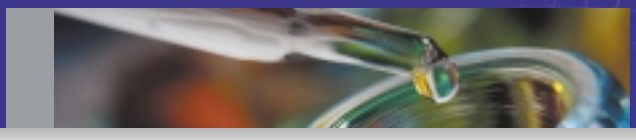
Excludes charges for stock compensation expense, amortization of goodwill and other intangibles, acquired in-process r&d expense, severance & related costs and common stock warrant expense net of tax

STOCK PRICE

(In $US)



**Average price calculated using daily volume and daily closing price*



DEAR FELLOW SHAREHOLDERS

Two Thousand One was a very good year for Harvard Bioscience. We again demonstrated our commitment to growth, profitability and leadership. Some of the many significant achievements at Harvard Bioscience in 2001 included:

- 34% revenue growth, proforma earnings of 17 cents per share, and ending cash of $29 million
- The transfer of over 70% of the shares held by our venture investors to the public float while at the same time maintaining an average stock price significantly above the IPO price
- Continued trend of quarterly revenue growth, now for seven consecutive quarters and for fourteen quarters on a year on year basis
- The introduction of several new products, including high throughput screening systems for model organisms, plate readers and a novel toxicity assay
- The acquisition of two businesses that strengthen our base of specialty products in ADMET
- The acquisition of two businesses that expanded our base of products for DNA, RNA and protein analysis
- The acquisition of a major new technology, COPAS™, which for the first time makes using model organisms such as nematode worms, fruit flies and zebrafish practical in drug discovery

Our mission is to profitably accelerate drug discovery. Our goal is to grow revenues and profits by a minimum of 30-35% per year and drive operating margin to 20%. We intend to achieve these goals through our three part growth strategy of innovation, acquisition and partnership.

Our business is providing tools, primarily scientific instruments, that accelerate the discovery of new drugs. Our customers include top pharmaceutical and biotechnology companies worldwide. These tools are focused on alleviating the current bottlenecks in the lengthy and expensive process of drug discovery. Our business model has two elements. The first is to provide a broad range of specialty products that have well established brand names and give us good access to customers, relatively predictable revenues and strong cash flows. This has provided the majority of our 38% compound annual growth rate and profits. This business model is proven and we are confident we can continue its implementation. Our aim is to add to this strong base a second element of breakthrough new technologies that have the potential to change the nature of drug discovery. We have invested in several such new technologies of which COPAS is the most significant. If we are successful with these new technologies it could increase our future rate of growth considerably.

We believe that our 2001 performance makes it very clear that Harvard Bioscience is a healthy, flexible and strategically managed company that is well positioned to achieve its goals in this high growth tools for drug discovery market.

On behalf of all the dedicated employees at Harvard Bioscience, we want to thank you for a year of continued support and look forward to an exciting and profitable future.

Sincerely,

Chane Graziano
Chief Executive Officer

David Green
President

GLOSSARY

GLOSSARY OF TERMS : : : : :

COMPOUND LIBRARY

A collection of molecules that resemble common drug molecules. Most pharmaceutical companies maintain libraries of over one million compounds. The compounds in these libraries are the starting points for discovering new drugs. Most compound libraries are maintained in microtitre plates – 3" by 5" plastic plates that usually contain 96 wells with each well being effectively the high throughput equivalent of a test-tube.

COMBINATORIAL CHEMISTRY

A process of using robots to automate the production of very large libraries of chemically diverse compounds. Most compound libraries contain substantial numbers of compounds manufactured by combinatorial chemistry.

TARGET IDENTIFICATION

This is identifying a molecule in the human body that is involved in a disease. Targets are almost always proteins. Target identification has been made much easier by the sequencing of the human genome (and that of other organisms) and the advent of gene chips. As a result of these innovations, target identification is no longer a bottleneck in drug discovery.

TARGET VALIDATION

Validating a target means showing that increasing or decreasing its activity has a beneficial impact on the disease. This is far harder than simply identifying a target and often involves the use of knock-out animals (i.e., animals that have had a gene related to the target "knocked out" or made inactive), transgenic animals (i.e., animals that have an extra gene related to the target "knocked in" or made active), or the study of the genetics of large populations of humans with known diseases.

GENOMICS

The study of all the genes in a particular organism, from plants to humans. A gene is a piece of DNA that produces a specific protein. Only a small portion of the DNA produces proteins.

PROTEOMICS

The study of all the proteins in a particular organism, from plants to humans. The proteins are produced according to the specific recipe coded in the DNA of the gene.

ASSAY DEVELOPMENT

Once a target is validated, an assay or test is devised that can show if a compound from a library can bind (i.e., chemically attach itself) to the target. Developing an assay is often a difficult process as the compound is typically only 1% of the size of the target protein.

HIGH THROUGHPUT SCREENING (HTS)

The use of an assay in a format, usually using a robot and a microtitre plate reader, that enables 10,000 or up to 100,000 assays to be run per day. Historically such assays have been fast, but have provided only very basic data on the interaction of the compound with the target. If an interaction is found the compound is called a "hit".

LEAD OPTIMIZATION

"Hits" from high throughput screening are only a starting point in creating a safe and effective drug. Generally, hits are low in efficacy and often toxic. Experienced medicinal chemists apply successive rounds of chemical modifications to the hits to improve the efficacy and reduce the toxicity. Optimized compounds are called "leads".

ADMET — Absorption, Distribution, Metabolism, Elimination and Toxicology

This describes what the human body does to a drug taken orally, (i.e. in pill form rather than injected directly into the bloodstream). The drug is absorbed into the bloodstream across the wall of the gut. It is distributed by the bloodstream to the different tissues in the body such as the heart and the brain. It is metabolized by the liver to make it easier for the kidneys to eliminate the drug from the blood. Toxicology is the adverse impact of the drug on the body. ADMET testing has traditionally been performed primarily in laboratory rats and mice.

MODEL ORGANISM

Any organism (from yeast to worms to monkeys) that enables scientists to model human diseases. The most common model organisms are yeast, fruit flies, nematode worms, zebrafish, mice and rats. However, the term model organism is most frequently used to describe fruit flies, nematodes and zebrafish.

MISSION

Profitably accelerate drug discovery

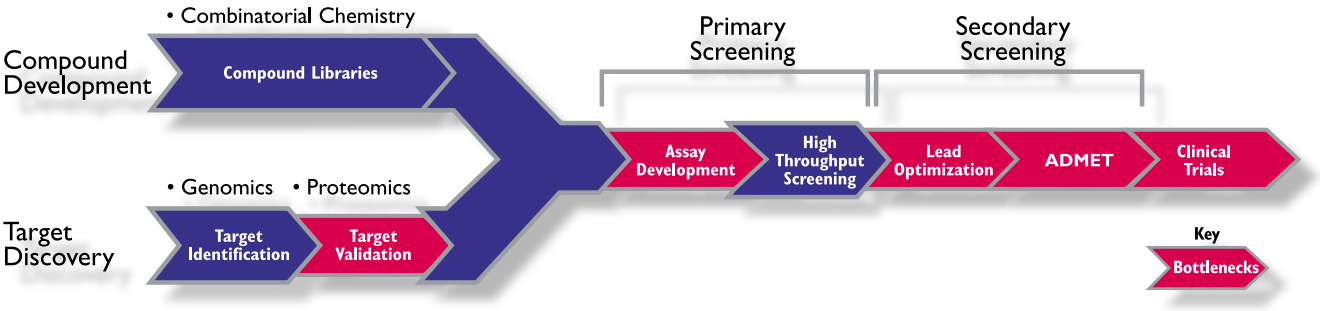
We provide tools that pharmaceutical and biotechnology companies use to accelerate drug discovery.

Our customers include the world's top pharmaceutical and biotechnology companies. The pharmaceutical industry is one of the most profitable and rapidly growing in the world. By supplying instruments, we benefit from the revolution in genomics without the risk and expense of developing new drugs.

In the last decade the industry has seen many breakthroughs in drug discovery:

BREAKTHROUGH		IMPACT
Sequencing genomes	> > > > > > > > >	identified many new pharmaceutical **targets**
Robotizing chemistry	> > > > > > > > > >	provided many new drug-like **compounds**
Automating plate-readers	> > > > > > > > > >	enabled **high throughput screening**

Despite these breakthroughs, the drug discovery process remains lengthy, expensive and bottlenecked. Boston Consulting Group recently reported that the average drug takes 15 years and costs $880 million to bring to market. The success of these early breakthroughs has driven the bottlenecks downstream. Today the key bottlenecks are illustrated in red below:



Our strategy is to provide instruments that alleviate today's bottlenecks in drug discovery. We believe that addressing today's bottlenecks gives us the opportunity for higher growth rates and higher margins. The bottlenecks we currently address are target validation, assay development and ADMET screening. We address these bottlenecks by designing, manufacturing and marketing a wide range of specialized research products that help pharmaceutical scientists discover new medicines. We sell these products worldwide through our wholly owned subsidiaries and through strategic partnerships with major life science companies.

STRATEGY

GROWTH STRATEGY

Our compound annual growth rate of revenues over the last five years has been 38%. We have achieved this through implementing a three part growth strategy of innovation, acquisition and partnership.

INNOVATION

We create new products. We often do this in conjunction with pharmaceutical companies or academic researchers. In 2001 we introduced new plate readers, new spectrophotometers for analyzing DNA, RNA and proteins, a new ventilator and COPAS technology for high throughput model organism research.

ACQUISITION

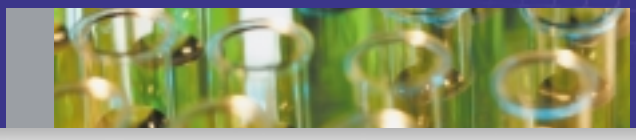
We buy businesses that either strengthen our base business or have the potential for major breakthroughs in drug discovery research. In 2001 we acquired:

- Asys Hitech in Austria for its plate readers and low volume dispensers
- Scie-Plas in England for its electrophoresis based DNA analysis products
- IMS in England for its anesthesiology products
- Warner Instruments in the USA for its cell and tissue electrophysiology products
- Union Biometrica in the USA for its high throughput model organism technology called COPAS

PARTNERSHIP

We leverage our technologies by collaborating with people who have capabilities we do not. In 2001 we partnered with:

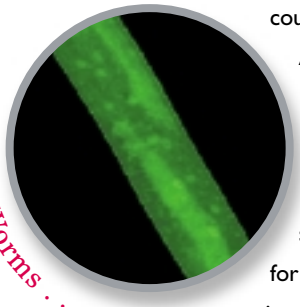
- A major pharmaceutical company for the development of low volume dispensers
- Two major pharmaceutical companies for the further development of COPAS technology
- Amersham Biosciences (formerly Amersham Pharmacia Biotech) for the continued distribution of many of our products for DNA, RNA and protein analysis



NEW TECHNOLOGY::::

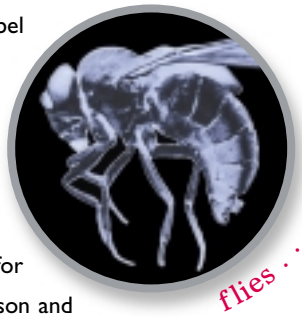
A potential breakthrough in drug discovery

Worms, flies and fish. Unlikely places to look for cures for human diseases? So it was thought until the genomes of the fruit fly *D. melanogaster* (these are the little flies that buzz around your peaches in the summer) and the nematode worm *C. elegans* (these 1mm long transparent worms live in your garden soil) were sequenced. When these sequences were compared to the human genome it was found that as many as 70% of human disease genes had counterparts in these small model organisms. There are fruit fly or nematode models of Alzheimer's disease, Parkinson's disease, epilepsy, diabetes, cancer and cystic fibrosis. A little discomforting perhaps to think that we humans are so similar to these lowly creatures. But genetically, it is true and thereby they provide us a way to study human disease.



Worms . . .

Fruit flies and nematodes have been studied by geneticists for over a century. However, since they could only be handled one at a time under a microscope they were impractical for drug discovery research that required high throughput techniques. We believe our proprietary and patent allowed technology COPAS is the first technology to enable the automated handling of these model organisms. In a COPAS system the organisms are kept in liquid suspension and flowed past a laser beam that scans them much like a barcode reader scans items at a supermarket checkout. Since the model organisms are transparent we can use a fluorescent tag to label an important biomolecular process – such as an errant protein that causes cancer – and then screen potential drugs from a library to see if they can suppress the cancerous protein and consequently reduce the fluorescent glow. If the COPAS instrument detects a reduction in the fluorescent glow, it automatically sorts the organism into a well of a 96 well microtitre plate. The organisms are not harmed by the sorting process and can be kept alive and bred for future generations if needed. Early pharmaceutical customers for COPAS include: Aventis, Exelixis, GlaxoSmithKline, Janssen Pharmaceutica (part of Johnson and Johnson), Novartis and Syngenta. In addition, major universities and research centers that have bought COPAS include: Duke University, Harvard University/Massachusetts General Hospital, the European Molecular Biology Laboratory, the Max Planck center in Germany and the Sanger Centre in the UK.



flies . . .

and fish.

The genome of the zebrafish (these are the small stripy fish you often see in a home aquarium) will be completed by the UK's leading genomics center – the Sanger Centre – in 2002. The zebrafish is a vertebrate (i.e., it has a spine) and thus is closer to humans on the phylogenetic tree than either worms or flies. In fact, the zebrafish has all the major human organs – heart, brain, bone, muscle, gut, liver, kidneys and gall bladder – and all the major human systems – circulatory system, nervous system and immune system. Thus, it is hoped that the zebrafish will be an even better model of human disease than the fruit fly and the nematode.

We recently demonstrated the ability of COPAS to analyze, sort and dispense into 96 well plates zebrafish embryos and hatchlings. While the zebrafish is a much newer model organism than the fruit fly and the nematode, there are already zebrafish models for human cholesterol metabolism and red blood cell production.

COPAS is one of several new technologies we own that, if successful, could significantly increase our rate of growth.

TECHNOLOGY

PROFITABILITY

BUSINESS MODEL : : : : :

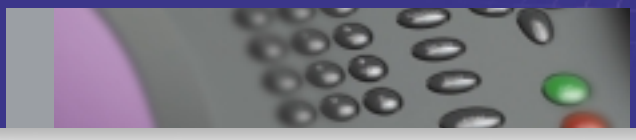
Growth, Profitability and Leadership

STRONG BASE BUSINESS

We have built our business with a balanced combination of profitability and growth. We have a strong base business of specialized products used in a wide range of drug discovery applications. These products are typically well established in fairly mature markets with above average, but not spectacular, growth rates. We own many well established brand names that, although not widely known outside their niches, are often leaders within them. These names include: Harvard Apparatus, Biochrom®, Warner Instruments, Clark Electromedical Instruments, Medical Systems, NaviCyte™ and Hugo Sachs Elektronik. These well established brands are sold through well established distribution channels. Most of our products for ADMET screening are sold through the Harvard Apparatus catalog – the first edition of which was in 1901. Most of our products for DNA, RNA and protein analysis are sold through our partnership with Amersham Biosciences – one of the world's largest life science companies. The strength of this base business is what has provided the majority of our growth and profitability to date.

BREAKTHROUGH NEW TECHNOLOGIES

Our aim is to add to this strong base business breakthrough new technologies that have the potential to change the nature of drug discovery. We have invested in several such new technologies including: small sample volume, high throughput purification techniques aimed primarily at the genomics and proteomics markets and the COPAS technology for high throughput/high content screening of model organisms. Of these, COPAS is the most significant investment to date. If we are successful with these new technologies it could increase our future rate of growth considerably.



STRONG FINANCIAL PERFORMANCE

PROFORMA* CONDENSED CONSOLIDATED STATEMENT OF OPERATIONS

	For the Twelve Months Ended December 31, 2001	2000
	(in thousands, except per share data, unaudited)	
Revenues	$ 40,868	$ 30,575
Costs and Expenses:		
Cost of Product Revenues	20,179	15,833
General & Administrative	7,001	5,181
Sales & Marketing	4,840	3,186
Research & Development	3,179	1,533
Total Costs and Expenses	35,199	25,733
Proforma Operating Profit	5,669	4,842
Other Income (Expense) net	1,243	(1,188)
Proforma Net Income before Taxes	6,912	3,654
Income Taxes	2,520	1,261
Proforma Net Income	$ 4,392	$ 2,393
Diluted Proforma Income per Share	$ 0.17	$ 0.13
Diluted Weighted Average Common Shares	26,382	18,459

	2001	2000
* Proforma excludes:		
Acquired In-Process R&D Expense	$ 5,447	$ —
Stock Compensation Expense	2,679	14,676
Severance & Related Costs	460	—
Amortization of Goodwill & Intangibles	1,744	604
Common Stock Warrant Interest Expense	—	36,885
Tax (Benefit) Expense related to above	(730)	98

STATEMENT OF CASH FLOWS SUMMARY

	For the Twelve Months Ended December 31, 2001	2000
	(in thousands)	
Cash Provided from Operating Activities	$ 4,095	$ 2,146
Cash Used in Investing Activities	(20,176)	(5,332)
Cash Provided from Financing Activities	9,698	36,521
Effect of Exchange on Cash	(49)	87
Increase (Decrease) in Cash	$ (6,432)	$ 33,422
Ending Cash & Cash Equivalents	$ 29,385	$ 35,817

STRENGTH

CORPORATE

CORPORATE INFO

BOARD OF DIRECTORS

Chane Graziano
Chairman & Chief Executive Officer

David Green
President

Christopher W. Dick
Managing Director
Ascent Venture Management, Inc.

Richard C. Klaffky
President
FINEC Corp.

John F. Kennedy
Chief Financial Officer
RSA Security, Inc.

Earl R. Lewis
Chairman, CEO & President
FLIR Systems, Inc

Robert Dishman, PhD
Chairman & CEO
Serenex, Inc.

MANAGEMENT

Chane Graziano
Chairman & Chief Executive Officer

David Green
President

Susan Luscinski
Chief Financial Officer

Mark Norige
Chief Operating Officer
Harvard Apparatus, Inc.

David Parr
Managing Director
Biochrom, Ltd.

David Strack, PhD
President
Union Biometrica, Inc.

CORPORATE ADDRESS

HARVARD BIOSCIENCE, INC.
84 October Hill Road
Holliston, Massachusetts 01746
www.harvardbioscience.com

INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

KPMG LLP
99 High Street
Boston, Massachusetts 02110

GENERAL COUNSEL

GOODWIN PROCTER LLP
Exchange Place
Boston, Massachusetts 02109

TRANSFER AGENT AND REGISTRAR

REGISTRAR AND TRANSFER COMPANY
10 Commerce Drive
Cranford, New Jersey 07016

ANNUAL MEETING OF SHAREHOLDERS

The Annual Shareholders' Meeting of Harvard Bioscience, Inc. will be held Thursday, May 23, 2002 at 11:00 a.m. at our general counsel's offices, Exchange Place, Boston, Massachusetts. Notice of the meeting and proxy statements will be mailed to shareholders in advance of the meeting.

DIVIDENDS

Harvard Bioscience, Inc. has never declared or paid dividends on its common stock and currently has no plans to do so in the foreseeable future.

SEC FILINGS

A copy of the Company's Form 10-K filed with the U.S. Securities and Exchange Commission may be obtained without charge by contacting Susan Luscinski, CFO, in writing to the corporate address above.

STOCK PROFILE

Harvard Bioscience, Inc. shares are traded on NASDAQ under the symbol "HBIO".

As of March 22, 2002 the number of record holders of HBIO common stock was approximately 100. We believe that the number of beneficial owners at that date was substantially higher.

STOCK PRICE RANGE

Fiscal Year Ended December 31, 2001

Quarter	High	Low
First	$ 11.750	$ 6.063
Second	$ 11.100	$ 5.900
Third	$ 14.200	$ 8.190
Fourth	$ 12.120	$ 7.870

FY 2001 average*	$ 9.600
FY 2001 closing	$ 9.940

**Calculated using daily volume at daily closing price*

IPO

Opening December 6, 2000	$ 8.000

SELECTED FINANCIAL DATA

Statement of Operations Data:	Years Ended December 31, 2001	2000	1999	1998	1997
	(in thousands, except share and per share data)				
Revenues	$ 40,868	$ 30,575	$ 26,178	$ 12,154	$ 11,464
Costs and Expenses:					
Cost of product revenues	20,179	15,833	13,547	5,351	5,128
General and administrative expense	7,001	5,181	4,147	2,317	2,338
Severance and other related costs	460	—	—	—	—
Sales and marketing expense	4,840	3,186	2,448	1,722	1,672
Research and development	3,179	1,533	1,188	325	207
Stock compensation expense	2,679	14,676	3,284	—	—
In-process research and development	5,447	—	—	—	—
Amortization of goodwill and other intangibles	1,744	604	368	27	—
Operating income (loss)	(4,661)	(10,438)	1,196	2,412	2,119
Other (expense) income:					
Foreign currency (loss) gain	(99)	(324)	(48)	21	(96)
Common stock warrant interest expense	—	(36,885)	(29,694)	(1,379)	(117)
Interest income (expense), net	1,352	(756)	(657)	(210)	(223)
Amortization of deferred financing costs	—	(153)	(63)	—	—
Other	(10)	45	(17)	10	106
Other (expense) income, net	1,243	(38,073)	(30,479)	(1,558)	(330)
(Loss) income before income taxes	(3,418)	(48,511)	(29,283)	854	1,789
Income taxes	1,790	1,359	137	783	682
Net (loss) income	(5,208)	(49,870)	(29,420)	71	1,107
Preferred stock dividends	—	(136)	(157)	(122)	(122)
Net (loss) income available to common shareholders	$ (5,208)	$ (50,006)	$ (29,577)	$ (51)	$ 985
(Loss) income per share:					
Basic	$ (0.20)	$ (6.25)	$ (5.28)	$ (0.01)	$ 0.13
Diluted	$ (0.20)	$ (6.25)	$ (5.28)	$ (0.01)	$ 0.06
Weighted average common shares:					
Basic	25,784,852	8,005,386	5,598,626	5,598,626	7,406,486
Diluted	25,784,852	8,005,386	5,598,626	5,598,626	17,500,194

Balance Sheet Data:	Years Ended December 31, 2001	2000	1999	1998	1997
	(in thousands)				
Cash and cash equivalents	$ 29,385	$ 35,817	$ 2,396	$ 957	$ 707
Working capital	32,565	40,552	3,783	2,205	1,698
Total assets	82,362	58,809	20,610	7,220	6,161
Long-term debt , net of current portion	637	1	5,073	638	829
Preferred stock	—	—	2,500	1,500	1,621
Common stock warrants	—	—	31,194	1,500	—
Stockholders' equity (deficit)	66,812	52,335	(25,711)	678	737

QUARTERLY FINANCIAL INFORMATION (UNAUDITED)

Statement of Operations Data:	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Fiscal Year
	(in thousands, except per share data)				
2001:					
Revenues	$ 8,607	$ 9,711	$ 10,643	$ 11,907	$ 40,868
Operating Expenses	8,089	15,032	10,619	11,789	45,529
Net Income (Loss) available to common shareholders	272	(5,365)	319	(434)	(5,208)
Income (Loss) per share:					
Basic	$ 0.01	$ (0.21)	$ 0.01	$ (0.02)	$ (0.20)
Diluted	$ 0.01	$ (0.21)	$ 0.01	$ (0.02)	$ (0.20)
2000:					
Revenues	$ 7,068	$ 7,390	$ 7,611	$ 8,506	$ 30,575
Operating Expenses	5,883	6,426	20,208	8,496	41,013
Net Income (Loss) available to common shareholders	(4,408)	(62,360)	(17,216)	33,978	(50,006)
Income (Loss) per share:					
Basic	$ (0.76)	$ (9.32)	$ (2.56)	$ 2.66	$ (6.25)
Diluted	$ (0.76)	$ (9.32)	$ (2.56)	$ 1.69	$ (6.25)

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Forward-Looking Statements

The following section is "Management's Discussion and Analysis of Financial Condition and Results of Operations" which contains statements that are not statements of historical fact and are forward-looking statements within the meaning of Federal securities laws. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. These statements reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties. We discuss many of these risks in detail under the heading "Important Factors That May Affect Future Operating Results" beginning on page 19. You should carefully review all of these factors in evaluating our financial condition and results of operations.

Overview

We are a provider of innovative, enabling tools for drug discovery research at pharmaceutical and biotechnology companies, universities and government research laboratories. We focus on critical bottlenecks in the drug discovery process - target validation, assay development and ADMET screening. Our ADMET screening products enable our customers to test drug candidates to determine their absorption, distribution, metabolism, elimination and toxicology properties prior to conducting costly clinical trials.

In providing tools for drug discovery generally, we have established a significant base business and have achieved brand recognition through our sale of precision pumps, ventilators, tissue/organ systems, cell biology and electrophysiology products. Since 1996, we have built upon our base business and brand recognition by adding new technologies in the areas of target validation, assay development and ADMET screening. Specifically, we have acquired the following product lines, businesses and technologies:

- In June 1998, we acquired products for cell injection systems from Medical Systems Corporation for $1.0 million in cash,
- In February 1999, we acquired Biochrom Ltd., which develops and manufactures DNA/RNA/protein calculators, spectrophotometers, amino acid analyzers and related consumables in the United Kingdom, from Pharmacia Biotech (Biochrom) Ltd for $7.0 million in cash,
- In March 1999, we entered into an exclusive license for the technology underlying our ScanTox™ in vitro toxicology testing product for $25,000 in cash and ongoing royalties and licensing fee payments,
- In September 1999, we acquired products for intracellular research from Clark Electromedical Instruments for $349,000 in cash,
- In November 1999, we acquired our NaviCyte™ diffusion chamber systems product for drug absorption testing from a subsidiary of Trega Biosciences for $390,000 in cash and future royalties,
- In November 1999, we acquired substantially all the assets and certain liabilities of Hugo Sachs Elektronik, consisting primarily of products for organ testing, for $730,000 in cash,
- In May 2000, we acquired certain assets of Biotronik, consisting primarily of products for amino acid analysis, for $469,000 in cash,
- In July 2000, we acquired substantially all the assets of AmiKa Corporation consisting of purification tips, spin columns, a 96 well drug binding assay and related technology and intellectual property for $3.1 million in cash,
- In December 2000, we acquired substantially all the assets and certain liabilities of MitoScan Corporation, a company that produces tools for toxicity testing for $383,000 in cash and future milestone payments and royalties,
- In May 2001, we acquired substantially all the assets of Warner Instruments Corporation, a company that designs, produces and markets electro-physiology products for approximately $2.6 million in cash,
- In May 2001, we acquired all the outstanding stock of Union Biometrica, Inc. for a combination of cash and stock of approximately $17.5 million. Union Biometrica invented, developed and initiated marketing of COPAS™, high throughput, high relevance model organism screening systems,

- In June 2001, for cash of approximately $1.5 million, we acquired through Harvard Apparatus, Ltd., one of our United Kingdom subsidiaries, substantially all the assets of International Market Supply Ltd, a company that produces and markets anesthesiology products,
- In November 2001, for cash of approximately $4.1 million, we acquired Scie-Plas Ltd. for its electrophoresis based sample preparation products and
- In December 2001, for cash of approximately $2.0 million, we acquired Asys Hitech GmbH for its plate readers and low volume liquid dispensers.

Revenues. We generate revenues by selling instruments, devices and consumables through our catalog, our direct sales force, our distributors and our web site. Every one to three years, we intend to distribute a new, comprehensive catalog initially in a series of bulk mailings, first to our existing customers, followed by mailings to targeted markets of potential customers. Over the life of the catalog, distribution will also be made periodically to potential and existing customers through direct mail and trade shows and in response to telephone inquiries. From time to time, we also intend to distribute catalog supplements that promote selected areas of our catalog or new products to targeted subsets of our customer base. Future distributions of our comprehensive catalog and our catalog supplements will be determined primarily by the incidence of new product introductions, which cannot be predicted. Our customers are end user research scientists at pharmaceutical and biotechnology companies, universities and government laboratories. Revenue from catalog sales in any period is a function of time elapsed since the last mailing of the catalog, the number of catalogs mailed and the number of new items included in the catalog.

For the year ended December 31, 2001, approximately 82% of our revenues were derived from products we manufacture or from collaboration and research grant projects. The remaining 18% of our revenues were derived from complementary products we distribute in order to provide the researcher with a single source for all equipment needed to conduct a particular experiment. For the year ended December 31, 2001, approximately 57% of our revenues were derived through catalog sales and through reference to our web site, which is an electronic version of our catalog. We do not currently have the capability to accept purchase orders through our web site. For the year ended December 31, 2001, approximately 60% of our revenues were derived from sales made by our non-U.S. operations. A majority of our international sales during this period consisted of sales to Amersham Biosciences, the distributor for our spectrophotometers, amino acid analyzers and plate readers. Amersham Biosciences distributes these products to customers around the world from its distribution center in Upsalla, Sweden, including to many customers located in the United States. As a result, we believe our international sales would have been less as a percentage of our revenues for the year ended December 31, 2001 if we had shipped our products directly to our end users.

Cost of product revenues. Cost of product revenues includes material, labor and manufacturing overhead costs, obsolescence charges, packaging costs, warranty costs, shipping costs and royalties. Our costs of product revenues may vary over time based on the mix of products sold. We sell products that we manufacture and products that we purchase from third parties. The products that we purchase from third parties have higher cost of goods sold because the profit is effectively shared with the original manufacturer. We anticipate that our manufactured products will continue to have a lower cost of goods sold as a percentage of revenues as compared with the cost of non-manufactured products for the foreseeable future.

General and administrative expense. General and administrative expense consists primarily of salaries and other related costs for personnel in executive, finance, accounting, information technology and human relations functions. Other costs include facility costs, professional fees for legal and accounting services, insurances and provision for doubtful accounts.

Sales and marketing expense. Sales and marketing expense consists primarily of salaries and related expenses for personnel in sales, marketing and customer support functions. We also incur costs for trade shows, demonstration equipment, public relations and marketing materials, consisting primarily of the printing and distribution of our 1,000 page catalog and supplements, and the maintenance of our web sites. We may from time to time expand our marketing efforts by employing additional technical marketing specialists in an effort to increase sales of selected categories of products in our catalog.

Research and development expense. Research and development expense consists primarily of salaries and related expenses for personnel and capital resources used to develop and enhance our products and to support collaboration agreements. Other research and development expense includes fees paid to consultants and outside service providers, and material costs for prototype and test units. We expense research and development costs as incurred. We believe that significant investment in product development is a competitive necessity and plan to continue to make these investments in order to realize the potential of new technologies that we develop, license or acquire.

Stock compensation expense. Stock compensation resulting from stock option grants to our employees represents the difference between the fair market value and the exercise price of the stock options on the grant date for those options considered fixed awards. Stock compensation expense is also recorded for stock option grants that were considered variable awards because the number of shares to be acquired by employees was indeterminable at the date of grant. Stock compensation on fixed awards is amortized as a charge to operations over the vesting period of the options.

Common stock warrant interest expense. On March 15, 1996, in connection with the issuance of redeemable preferred stock and subordinated debentures, 8,509,905 common stock warrants were issued. The related common stock warrant interest expense represented an accrual of a liability to warrant holders that would have required us to pay cash equal to the fair market value of the warrants in exchange for the warrants, or any common stock from the exercise of the warrants, beginning March 15, 2002. Effective with our initial public offering of common stock in December 2000, the warrants were exercised for common stock and, as a result, the right to be paid cash terminated.

Our business has historically been affected by a number of factors that cause revenue and earnings to vary from quarter to quarter, including catalog mailings, new product introductions, and our substantial European business, which in summer months defers purchases and acquisitions. As a result, we believe that revenue and earnings in one quarter of the year may not be indicative of revenue and earnings in a subsequent quarter.

Critical Accounting Policies

Our critical accounting policies are as follows:

- valuation of identifiable intangible assets and in-process research and development in business combinations;
- valuation of long-lived and intangible assets and goodwill;
- accounting for income taxes;
- revenue recognition and
- inventory.

Valuation of identifiable intangible assets in business combinations. Identifiable intangible assets consist primarily of trademarks, assembled workforce, and acquired technology. Such intangible assets arise from the allocation of purchase price of businesses acquired to identifiable intangible assets based on their respective fair market value. Amounts assigned to such identifiable intangible assets are based on independent appraisals using established valuation techniques. The value assigned to trademarks was determined by estimating the royalty income that would be negotiated at an arm's-length transaction if the asset were licensed from a third party. A discount factor, ranging from 28.5% to 31.5%, which represents both the business and financial risks of such investments, was used to determine the present value of the future streams of income attributable to trademarks. The specific approach used to value trademarks was the Relief from Royalty ("RFR") method. The RFR method assumes that an intangible asset is valuable because the owner of the asset avoids the cost of licensing that asset. The royalty savings are then calculated by multiplying a royalty rate times a determined royalty base, (i.e., the applicable level of future revenues). In determining an appropriate royalty rate, a sample of guideline, arm's length royalty and licensing agreements are analyzed. In determining the royalty base, forecasts are used based on management's judgments of expected conditions and expected courses of actions. Assembled workforce was valued by estimating the current cost necessary to create a similar replacement workforce including costs to recruit, hire and train. The value assigned to acquired technology was determined by using a discounted cash flow model which measures what a buyer would be willing to pay currently for the future cash stream potential of existing technology. The specific method used to value the technologies involved estimating future cash flows to be derived as a direct result of those technologies, and discounting those future streams to their present value. The discount factors used, ranging from 33.5% to 36%, reflects the business and financial risks of an investment in technologies. Forecasts of future cash flows are based on managements' judgment of expected conditions and expected courses of action.

Valuation of in-process research and development in business combinations. Purchase price allocation to in-process research and development represents the estimated fair value of research and development projects that have no alternative future use. The value assigned to in-process research and development was determined by independent appraisal by estimating the cost to develop the purchased in-process research and development into commercially feasible products, estimating the percentage of completion at the acquisition date, estimating the resulting net risk-adjusted cash flows from the projects and discounting the net cash flows to their present value. The discount rates used in determining the in-process research and development expenditure reflects a higher risk of investment because of the higher level of uncertainty due in part to the nature of the Company and the industry to constantly develop new technology for future product releases and ranged from 37.5% to 43.5%. The forecasts used by the

Company in valuing in-process research and development were based on assumptions the Company believes to be reasonable, but which are inherently uncertain and unpredictable. Given the uncertainties of the development process, no assurance can be given that deviations from the Company's estimates will occur and no assurance can be given that the in-process research and development projects identified will ever reach either technological or commercial success. The amounts allocated in 2001 to in-process research and development of $5,447,000 were expensed as of the acquisition dates.

Valuation of long-lived and intangible assets and goodwill. In accordance with the provisions of Statement of Financial Accounting Standards (SFAS) No. 121, *Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of*, we assess the impairment of identifiable intangibles, long-lived assets and goodwill whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Factors we consider important which could trigger an impairment review include the following: significant underperformance relative to expected historical or projected future operating results; significant changes in the manner of our use of the acquired assets or the strategy for our overall business; significant negative industry or economic trends; significant decline in our stock price for a sustained period; and our market capitalization relative to net book value.

If we were to determine that the value of long-lived assets, intangibles and goodwill were not recoverable based on the existence of one or more of the aforementioned factors, recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to undiscounted future net cash flows expected to be generated by an asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying value of the assets exceeds the fair value of the assets. Assets to be disposed of are reported at the lower of the carrying amount or fair value less costs to dispose.

In June 2001, SFAS No. 142, "*Goodwill and Other Intangible Assets*" was issued. SFAS No. 142 addresses financial accounting and reporting for acquired goodwill and other intangible assets. Among other things, SFAS No. 142 requires that goodwill and intangible assets with indefinite useful lives no longer be amortized, but rather tested annually for impairment. Accordingly, the Company adopted SFAS No. 142 on January 1, 2002 and will cease to recognize approximately $1.5 million of goodwill amortization expense in 2002. At December 31, 2001, the Company has goodwill and intangibles with indefinite future lives of approximately $24 million on its consolidated balance sheet. In lieu of amortization, we are required to perform an initial impairment review of our goodwill in 2002 and an annual impairment review thereafter. We expect to complete our initial review during the second quarter of 2002.

Accounting for income taxes. We are required to estimate our income tax expense in each of the jurisdictions in which we operate. This involves us estimating our current and deferred income tax expense as well as accounting for differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. The future tax consequences attributable to these differences result in deferred tax assets and liabilities, which are included in our consolidated balance sheets. We must assess the recoverability of the deferred tax assets by considering whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. To the extent we believe that recovery does not meet this "more likely than not" standard, we must establish a valuation allowance. If a valuation allowance is established or increased in a period, we must allocate the related income tax expense to income from continuing operations in the consolidated statement of operations. To the extent a valuation is attributable to income tax benefits allocated to shareholders' equity, the related valuation allowance must be allocated accordingly to stockholders' equity.

Management judgment is required in determining our income tax provision, deferred tax assets and liabilities and any valuation allowance recorded against net deferred tax assets. At December 31, 2001, we have not established a valuation allowance as we believe that the deferred tax assets at December 31, 2001 will more likely than not be realized in the carryback and carryforward periods based on the criteria set forth in SFAS 109, *Accounting for Income Taxes*. We will review the recoverability of deferred tax assets during each reporting period.

Revenue recognition. The Company recognizes revenue from product sales generally upon shipment or installation, if applicable, provided that persuasive evidence of an arrangement exists, the sales price is fixed or determinable, collectability is reasonably assured and title and risk of loss have passed to the customer. The Company has no obligations to customers after the date products are shipped or installed, if applicable, other than pursuant to warranty obligations. The Company provides for the estimated costs to fulfill customer warranty obligations upon the recognition of the related revenue. The Company provides for the estimated amount of future returns upon shipment of products or installation, if applicable, based on historical experience. While product returns and warranty costs have historically not been significant, they have been within our expectations and the provisions established, however, there is no assurance that we will continue to experience the same return rates and warranty repair costs that we have in the past. Any significant increase in product return rates or a significant increase in the cost to repair our products could have a material adverse impact on our operating results for the period or periods in which such returns or increased

costs materialize. The Company makes estimates evaluating its allowance for doubtful accounts. The Company continuously monitors collections and payments from its customers and maintains a provision for estimated credit losses based upon our historical experience and any specific customer collection issues that we have identified. While such credit losses have historically not been significant, they have been within our expectations and the provisions established, however, there is no assurance that we will continue to experience the same credit loss rates that we have in the past. A significant change in the liquidity or financial position of our customers could have a material adverse impact on the collectability of our accounts receivable and our future operating results.

Inventory. The Company values its inventory at the lower of the actual cost to purchase (first-in, first-out method) and/or manufacture the inventory or the current estimated market value of the inventory. The Company regularly reviews inventory quantities on hand and records a provision to write down excess and obsolete inventory to its estimated net realizable value if less than cost, based primarily on its estimated forecast of product. Since forecasted product demand quite often is a function of previous and current demand, a significant decrease in demand could result in an increase in the charges for excess inventory quantities on hand. In addition, the Company's industry is subject to technological change and new product development, and technological advances could result in an increase in the amount of obsolete inventory quantities on hand. Therefore, any significant unanticipated changes in demand or technological developments could have a significant impact on the value of the Company's inventory and its reported operating results.

Results of Operations

Year Ended December 31, 2001 Compared to Year Ended December 31, 2000

Revenues. Revenues increased $10.3 million, or 34%, to $40.9 million in 2001 from $30.6 million in 2000. Approximately $4.0 million of the $10.3 million increase, or 39%, represented the base revenues, revenues stream prior to acquisition, for the acquisitions made in 2001 and the full period effect of base revenues from acquisitions made in 2000. The balance of the increase was from existing businesses that introduced new products including new lines of spectrophotometers and plate readers and from the leveraged growth in acquisitions. Revenues for 2001 would have been approximately $42.0 million if our sales denominated in foreign currencies were translated into U.S. dollars using 2000 exchange rates, an increase of 37% over 2000.

Cost of product revenues. Cost of product revenues increased $4.3 million, or 27%, to $20.2 million in 2001 from $15.8 million in 2000. As a percentage of total revenues, cost of product revenues for 2001 was lower by 2.4 % compared to 2000 due to a combination of product mix and collaboration revenue. A significant portion of the expenses associated with collaboration revenue is included in research and development expense.

General and administrative expense. General and administrative expense increased $1.8 million, or 35%, to $7.0 million in 2001 from $5.2 million in 2000 due primarily to acquisitions. Excluding the general and administrative spending from the acquisitions, general and administrative expense increased $0.7 million, or 14%, due to the full period effect of the additional costs associated with public company status, additional headcount to support expanding operations, and legal expense in connection with the suit against us by Harvard University (see "Factors Affecting Future Operating Results"). As a percentage of revenues, general and administrative expense remained constant at approximately 17%.

Sales and marketing expense. Sales and marketing expense increased $1.7 million, or 52%, to $4.8 million in 2001 from $3.2 million in 2000 due primarily to acquisitions. Excluding the effect of acquisitions, sales and marketing expense grew $244,000, or 8%, due primarily to the addition of customer and technical support personnel as a result of our growing customer base and revenues. As a percentage of revenues, sales and marketing expense was 12% in 2001 compared to 10% in 2000. This increasing percentage reflects the continued addition of sales and marketing personnel to promote technology acquired in 2000 and 2001.

Research and development expense. Research and development spending was $3.2 million in 2001, $1.8 million of which resulted from 2001 acquisitions. Excluding the acquired research and development programs, spending in 2001 was approximately $1.4 million, basically unchanged from spending in 2000. As a percentage of revenues, research and development was 8% in 2001 compared to 5% in 2000. This higher level resulted primarily from the acquisition of Union Biometrica, which, as an early stage commercial technology company, spends a higher percentage of revenues on research and development than our traditional businesses. The Union Biometrica acquisition is expected to result in research and development spending at a higher level as a percentage of revenues than we have traditionally experienced.

In-process research and development expense. As of the date of the acquisitions of Warner Instruments and Union Biometrica, we recorded $159,000 and $5.3 million respectively of in-process research and development expense representing the estimated fair value of acquired research and development projects with no alternative future use.

Stock compensation expense. We recorded $2.7 million of stock compensation expense in the twelve months ended December 31, 2001. We will recognize approximately $2.0 million of additional expense over the remaining vesting life of the options. In 2000, we recorded stock compensation expense of approximately $4.7 million in connection with the grant of stock options to employees and we recorded $10.0 million of non-recurring stock compensation expense in connection with options granted in 1996 and 1999.

Amortization of goodwill and other intangibles. Amortization of goodwill and other intangibles, including amortization of acquired technology, was $1.7 million in 2001 and $604,000 in 2000. This increase of $1.1 million was the result of amortizing additional goodwill and other intangibles incurred in connection with our acquisitions in 2001 and the full year effect of our 2000 acquisitions.

Other income (expense), net. Other income, net, was $1.2 million in 2001 compared to other expense, net, of $38.1 million in 2000. In 2000, other expense, net, included a non-cash charge for common stock warrant interest expense of $36.9 million. Common stock warrant interest expense represents the difference between the fair value of common stock warrants for financial reporting purposes and their exercise price. This liability represented the right of warrant holders to require us to pay cash equal to the fair market value of the warrants in exchange for the warrants, or any common stock from the exercise of the warrants, beginning March 15, 2002. Effective with our initial public offering in December 2000, the warrants were exercised for common stock and the right to be paid cash terminated. The liability previously recorded became part of common stock and additional-paid-in capital. Net interest income for 2001 was $1.4 million compared to net interest expense of $756,000 in 2000. Net interest income for 2001 was the result of interest earned on the proceeds from our December 2000 initial public offering and the underwriters exercise of the over allotment in January 2001. The 2000 net interest expense resulted primarily from debt, which was incurred to finance acquisitions, partially offset by interest income on proceeds from the initial public offering. Foreign currency loss in 2001 decreased approximately $225,000 to $100,000 due primarily to a decline in dollar denominated debt in foreign subsidiaries and to less unfavorable exchange rates during 2001.

Income taxes. The Company's effective income tax rates were 37% for 2001 and 36% for 2000 not withstanding the effects of the nondeductible in-process research and development charges for 2001, certain stock compensation expense and certain amortization of goodwill and intangibles for 2001 and 2000, and common stock warrant interest expense for 2000. The increase in the income tax rate was principally due to increased taxable income in jurisdictions that have higher statutory income tax rates, primarily in Germany.

Year Ended December 31, 2000 Compared to Year Ended December 31, 1999

Revenues. Revenues increased $4.4 million, or 17%, to $30.6 million in 2000 from $26.2 million in 1999. Approximately $2.2 million of the $4.4 million increase, or 50%, was attributable to the full period effect of revenues from the acquisition of our Hugo Sachs subsidiary in November 1999. Approximately $1.9 million of the increase was from existing business revenue growth and the balance was from product line acquisitions made in the second half of 1999. Revenues for 2000 would have been approximately $31.8 million if our sales denominated in foreign currencies were translated into U.S. dollars using 1999 exchange rates, an increase of 22% over 1999.

Cost of product revenues. Cost of product revenues increased $2.3 million, or 17%, to $15.8 million in 2000 from $13.5 million in 1999. As a percentage of revenues, cost of product revenues was virtually unchanged for 2000 compared to 1999.

General and administrative expense. General and administrative expense increased $1.0 million, or 25%, to $5.2 million in 2000 from $4.2 million in 1999 due primarily to increased headcount and additional expenses related to being a public company as well as the full period effect of the Biochrom subsidiary which was acquired in February 1999. As a percentage of revenues, general and administrative expense increased to 17% in 2000 from 16% in 1999.

Sales and marketing expense. Sales and marketing expense increased $737,000, or 30%, to $3.2 million in 2000 from $2.5 million in 1999. The increase was primarily due to additional sales and marketing expenses incurred in acquired businesses and to a lesser extent the addition of marketing personnel and additional catalog costs. As a percentage of revenues, sales and marketing expense was 10% in 2000 compared to 9% in 1999. This increasing percentage reflected the addition of marketing personnel to promote newly acquired technology.

Research and development expense. Research and development spending increased $345,000, or 29%, to $1.5 million in 2000 from $1.2 million in 1999. The increase in research and development expense resulted from additional research and development expenses incurred in acquired businesses, spending on product enhancement and new product development, primarily on ScanTox in vitro toxicology testing and other core technology. As a percentage of revenues, research and development expense was 5% in each of 2000 and 1999.

Stock compensation expense. We recorded $14.7 million of stock compensation expense in 2000. In connection with the grant of stock options to employees in 2000, we recorded stock compensation expense of approximately $4.7 million In addition, in 2000, we also recorded $10.0 million of non-recurring stock compensation expense in connection

with options granted in 1996 and 1999. In 1999, we recorded $3.3 million of stock compensation expense related to these 1996 and 1999 option grants.

Amortization of goodwill. Amortization of goodwill was $604,000 in 2000 and $368,000 in 1999. This increase of $236,000, or 64%, was the result of amortizing additional goodwill incurred in connection with our acquisitions in 2000 and the full year effect of our 1999 acquisitions.

Other expense, net. Other expense, net, was $38.1 million in 2000 compared to $30.5 million in 1999. Other expense, net, included a non-cash charge for common stock warrant interest expense of $36.9 million in 2000 and $29.7 million in 1999. Common stock warrant interest expense represents the difference between the fair value of the common stock warrants for financial reporting purposes and their exercise price. This liability represented the right of warrant holders to require us to pay cash equal to the fair market value of the warrants in exchange for the warrants, or any common stock from the exercise of the warrants, beginning March 15, 2002. Effective with our initial public offering in December 2000, the warrants were exercised for common stock and the right to be paid cash terminated. The liability previously recorded became part of common stock and additional-paid-in capital. Net interest expense increased $100,000, or 15%, to $756,000 in 2000 from $656,000 in 1999. The increase resulted primarily from higher debt balances in 2000, which were incurred to finance acquisitions, partially offset by interest income on proceeds from the initial public offering. Foreign currency loss increased $276,000 to $324,000 due primarily to dollar denominated debt in a foreign subsidiary and more unfavorable exchange rates in 2000.

Income taxes. The Company's effective income tax rates were 36% for 2000 and 33% for 1999 notwithstanding the impact of common stock warrant interest expense, certain stock compensation expense and certain amortization of goodwill and other intangibles which is not deductible for income tax purposes. The increase in the rate was principally due to increased taxable income in certain foreign jurisdictions that have higher statutory income tax rates, primarily in Germany.

Liquidity and Capital Resources

Historically, we have financed our business through cash provided by operating activities, the issuance of common stock, preferred stock, and bank borrowings. Our liquidity requirements have arisen primarily from investing activities, including funding of acquisitions, payments on outstanding indebtedness, research and development expenditures, and capital expenditures. As of December 31, 2001, we had cash and cash equivalents of $29.4 million. Since 1996, we have raised $65.0 million, consisting of $2.5 million of preferred and common stock issued in private placements or upon exercise of stock options and warrants, $11.7 million of debt and $51.8 million from issuance of common stock in our initial public offering in December 2000 and the subsequent exercise of the underwriters over allotment in January 2001. Upon receipt of the initial public offering proceeds on December 12, 2000, we repaid all debt and redeemed all outstanding preferred stock.

Our operating activities generated cash of $4.1 million in 2001, $2.1 million in 2000 and $2.9 million in 1999. For all periods presented, operating cash flows were primarily due to operating results, including the full-year effect of acquisitions prior to non-cash charges, partially offset by working capital requirements. Working capital requirements were affected by acquisitions, which increased accounts receivable and inventory carrying amounts partially offset by increased amounts in accounts payable and accrued expenses

Our investing activities used cash of $20.2 million in 2001, $5.3 million in 2000 and $8.5 million in 1999. Cash has been used in the following technology and business acquisitions:

- $2.0 million for Asys Hitech GmbH in December 2001,
- $4.1 million for Scie-Plas Ltd. in November 2001,
- $1.6 million for International Market Supply, Ltd. in June 2001,
- $7.5 million for Union Biometrica, Inc. in May 2001,
- $2.7 million for Warner Instruments Corporation in May 2001,
- $383,000 for substantially all the assets of MitoScan Corporation in December 2000,
- $3.1 million for substantially all the assets of AmiKa Corporation in July 2000,
- $469,000 for Biotronik's amino acid analysis systems business in May 2000,
- $390,000 for the NaviCyte diffusion chamber systems product line in November 1999,
- $730,000 for Hugo Sachs Elektronik in November 1999,
- $349,000 for intracellular research products from Clark Electromedical Instruments in September 1999 and
- $7.0 million for Biochrom in February 1999.

Our financing activities have historically consisted of borrowings under a revolving credit facility, long-term debt and the issuance of preferred stock and common stock, including the common stock issued in our initial public offering. Financing activities provided cash of $9.7 million in 2001 and $36.5 million in 2000, and $7.0 million in 1999. Prior to 1999, we had historically generated sufficient cash flow from operations to fund expenditures on capital equipment, debt service, equity transactions, stock repurchases and preferred dividend payments. In 1999, in connection with the acquisition of Biochrom, we increased our long-term indebtedness by approximately $5.5 million and issued approximately $1.0 million in convertible preferred stock. As a result, the level of debt service required increased substantially compared to historical levels. Upon completion of the initial public offering, the convertible preferred stock was converted into common stock and we used $1.5 million of the offering proceeds to redeem our series A redeemable preferred stock and $10.4 million to repay the bank term loan, the subordinated debt and the revolving credit facility.

Based on our operating plans, we expect that the remaining proceeds from our initial public offering and cash generated from operations will be sufficient to finance operations and capital expenditures for the foreseeable future, however, we may use substantial amounts of capital to accelerate product development, expand our sales and marketing activities or make acquisitions. We may need to raise additional capital to the extent that we exhaust our available capital through these activities. Additional capital raising activities may be dilutive to existing stockholders to the extent we raise capital by issuing equity securities. Moreover, additional capital may not be available on acceptable terms or at all. Accordingly, there can be no assurance that we will be successful in raising additional capital.

Disclosures about Contractual Obligations

The following schedule represents our contractual obligations as of December 31, 2001.

	Payments Due by Period						
Contractual Obligation	Total	2002	2003	2004	2005	2006	2007 & beyond
Long-term debt	$ 4,333,174	$ 3,821,390	$ 511,784	$ —	$ —	$ —	$ —
Capital leases	242,737	91,113	77,733	36,381	18,032	19,478	—
Operating leases	5,176,459	995,285	988,251	905,135	683,328	556,140	1,048,320
Total	$ 9,752,370	$ 4,907,788	$ 1,577,768	$ 941,516	$ 701,360	$ 575,618	$ 1,048,320

Impact of Foreign Currencies

We sell our products in many countries and a substantial portion of our sales, costs and expenses are denominated in foreign currencies, especially the United Kingdom pound sterling and the Euro. For fiscal years 2001 and 2000, the U.S. dollar strengthened against these currencies resulting in reduced consolidated revenue and earnings growth, as expressed in U.S. dollars as well as, resulting in reduced foreign equity as expressed in U.S. dollars. For fiscal years 2001 and 2000, the loss associated with the translation of foreign equity into U.S. dollars was approximately $235,000 and $500,000 respectively. In addition, the currency fluctuations resulted in foreign currency losses of approximately $100,000 in 2001 and $324,000 in 2000 related primarily to dollar denominated debt at our foreign subsidiaries.

Historically, we have not hedged our foreign currency position. Currently, we attempt to manage foreign currency risk through the matching of assets and liabilities. However, as our sales expand internationally, we plan to evaluate our currency risks and we may enter into foreign exchange contracts from time to time to mitigate foreign currency exposure.

Backlog

Our order backlog was approximately $2.9 million as of December 31, 2001 and $2.8 million as of December 31, 2000. We include in backlog only those orders for which we have received valid purchase orders. Purchase orders may be cancelled at any time prior to shipment. Our backlog as of any particular date may not be representative of actual sales for any succeeding period. We typically ship our backlog at any given time within 90 days.

Recently Issued Accounting Pronouncements

In June 2001, SFAS 141, "*Business Combinations*" was issued. SFAS No. 141, which is effective for acquisitions initiated after June 30, 2001, prohibits the use of pooling of interests method of accounting for business combinations and amends the accounting and financial reporting requirements for business combinations accounted for by the purchase method. SFAS No. 141 establishes the criteria that intangible assets acquired in a purchase method business combination must meet to be recognized and reported apart from goodwill. The Company has adopted SFAS No. 141 for all business combinations initiated after June 30, 2001. Goodwill and intangible assets determined to have an indefinite useful life acquired in a purchase business combination completed after June 30, 2001 will not be amortized, but will continue to be evaluated for impairment. Goodwill and intangible assets acquired in business combinations completed before July 1, 2001 will continue to be amortized and tested for impairment prior to the full adoption of SFAS No. 142, "*Goodwill and Other Intangible Assets*".

In June 2001, SFAS No. 142, "*Goodwill and Other Intangible Assets*" was issued. SFAS No. 142, addresses financial accounting and reporting for acquired goodwill and other intangible assets. Among other things, SFAS No. 142 requires that goodwill and intangible assets with indefinite useful lives no longer be amortized, but rather tested annually for impairment. This statement is effective for fiscal years beginning after December 15, 2001. Accordingly, the Company adopted SFAS No. 142 on January 1, 2002 and will cease to recognize approximately $1.5 million of goodwill amortization expense in 2002. At December 31, 2001, there was approximately $24 million of goodwill and intangible assets with indefinite lives on the consolidated balance sheet.

In June 2001, SFAS No. 143, "*Accounting for Assets Retirement Obligations*" was issued. SFAS No. 143 applies to legal obligations associated with the retirement of certain tangible long-lived assets. This statement is effective for fiscal years beginning after June 15, 2002. Accordingly, the Company will adopt SFAS No. 143 on January 1, 2003. The Company does not expect that the adoption of this statement will have a material impact on consolidated results of operations or financial position.

In August 2001, SFAS No. 144, "*Accounting for the Impairment or Disposal of Long-Lived Assets*" was issued. This statement addresses the financial accounting and reporting for the impairment or disposal of long-lived assets. It supersedes SFAS No. 121, "*Accounting for the Impairment of Long Lived Assets and for Long Lived Assets to be Disposed Of*". SFAS No. 144 is effective for fiscal years beginning after December 15, 2001. Accordingly, the Company adopted SFAS No. 144 on January 1, 2002. The adoption of this statement did not have a material impact on the consolidated results of operations or financial position.

Impact of Inflation

We believe that our revenues and results of operations have not been significantly impacted by inflation during the past three years.

Important Factors That May Affect Future Operating Results

Our operating results may vary significantly from quarter to quarter depending on a number of factors, including:

If we are unable to achieve and sustain market acceptance of our new target validation and ADMET screening products across their broad intended range of applications, we will not generate expected revenue growth. Our business strategy depends on our successfully developing and commercializing our new target validation and ADMET screening technologies to meet our customers' expanding needs and demands, an example of which is the COPAS™ technology obtained from our 2001 acquisition of Union Biometrica. Market acceptance of this and other new products will depend on many factors, including the extent of our marketing efforts and our ability to demonstrate to existing and potential customers that our technologies are superior to other technologies and products that are available now or may become available in the future. If our new products do not gain market acceptance, it could materially adversely affect our business and future growth prospects.

Our products compete in markets that are subject to rapid technological change, and therefore one or more of our products could be made obsolete by new technologies. Because the market for drug discovery tools is characterized by rapid technological change and frequent new product introductions, our product lines may be made obsolete unless we are able to continually improve our existing products and develop new products. To meet the evolving needs of our customers, we must continually enhance our current and planned products and develop and introduce new products. However, we may experience difficulties that may delay or prevent the successful development, introduction and marketing of new products or product enhancements. In addition, our product lines are based on complex technologies that are subject to rapid change as new technologies are developed and introduced in the marketplace. We may have difficulty in keeping abreast of the rapid changes affecting each of the different markets we serve or intend to serve.

Our failure to develop and introduce products in a timely manner in response to changing technology, market demands or the requirements of our customers could cause our product sales to decline, and we could experience significant losses.

We offer and plan to offer a broad product line and have incurred and expect to continue to incur substantial expenses for development of new products and enhanced versions of our existing products. The speed of technological change in our market may prevent us from being able to successfully market some or all of our products for the length of time required to recover development costs. Failure to recover the development costs of one or more products or product lines could decrease our profitability or cause us to experience significant losses.

We have limited experience in manufacturing some of our products that could cause problems or delays resulting in lost revenue. If we fail to manufacture and deliver products in a timely manner, our relationships with our customers could be seriously harmed, and our revenue could decline. To achieve the production levels necessary for successful commercialization, we will need to scale-up our manufacturing facilities and in some cases establish automated manufacturing methods and quality control procedures. We cannot assure you that manufacturing or quality control problems will not arise as we attempt to scale-up our production or that we can scale-up manufacturing and quality control in a timely manner or at commercially reasonable costs. If we are unable to manufacture these products consistently on a timely basis because of these or other factors, we may not achieve the level of sales from these products that we otherwise anticipate.

If Amersham Biosciences (formerly Amersham Pharmacia Biotech) terminates its distribution agreement with us or fails to perform its obligations under our distribution agreement, it could impair the marketing and distribution efforts for some of our products and result in lost revenues. For the year ended December 31, 2001, approximately 30% of our revenues were generated through an agreement with Amersham Biosciences, which was renegotiated in August 2001, under which Amersham Biosciences acts as our primary marketing and distribution channel for the products of our Biochrom subsidiary. Under the terms of this agreement, we are restricted from allowing another person or entity to distribute, market and sell the majority of the products of our Biochrom subsidiary. We are also restricted from making or promoting sales of the majority of the products of our Biochrom subsidiary to any person or entity other than Amersham Biosciences or its authorized sub-distributors. We have little or no control over Amersham Biosciences' marketing and sales activities or the use of its resources. Amersham Biosciences may fail to purchase sufficient quantities of products from us or perform appropriate marketing and sales activities. The failure by Amersham Biosciences to perform these activities could materially adversely affect our business and growth prospects during the term of this agreement. In addition, our inability to maintain our arrangement with Amersham Biosciences for product distribution, could materially impede the growth of our business and our ability to generate sufficient revenue. Our agreement with Amersham Biosciences may be terminated with 30 day notice under some circumstances, including in the event of a breach of a material term by us. This agreement has a five year term; however, it may be terminated in accordance with its terms by either party upon 18 months prior written notice. While we believe our relationship with Amersham Biosciences is good, we cannot guarantee that the contract will be renewed or that Amersham Biosciences will aggressively market our products in the future.

We may be adversely affected by litigation involving Harvard University. On December 26, 2000, Harvard University filed a lawsuit in U.S. District Court, District of Massachusetts alleging that our use of the "Harvard Bioscience" and "Harvard Apparatus" names infringes on Harvard University's trademarks. Harvard University is seeking both injunctive relief and monetary damages. We believe that these claims are without merit, and we are vigorously defending against such claims. On April 10, 2001, the U.S. District Court, District of Massachusetts denied Harvard University's request for a preliminary injunction prohibiting Harvard Bioscience from using the names "Harvard Bioscience" and "Harvard Apparatus". The Court did issue an order directing Harvard Bioscience not to use the "Harvard" name in the color crimson or in a font similar to the font used by Harvard University. We believe that the defense of these claims could involve significant litigation-related expenses, but that it will not have a material adverse effect on our business, financial condition or results of operations. If claims for injunctive relief or other damages are decided against us, we could suffer monetary damages, lose our ability to use the names "Harvard Bioscience" and "Harvard Apparatus," lose the reputation and goodwill associated with these names and ultimately experience decreased revenues and earnings in subsequent periods.

We may be adversely affected by litigation involving Paul D. Grindle. On February 4, 2002, Paul D. Grindle, the former owner of Harvard Apparatus, Inc., initiated an arbitration proceeding against the Company and certain directors before JAMS, an arbitration firm in Boston, Massachusetts. Mr Grindle's claims arise out of post-closing purchase price adjustments related to the Company's purchase of the assets and business of Harvard Apparatus by virtue of an Asset Purchase Agreement dated March 15, 1996 and certain related agreements. In the arbitration demand, Mr. Grindle sought the return of 1,563,851 shares of stock in the Company, or the disgorgement of the profits of the

Company's sale of the stock, as well as punitive damages and attorney's fees under Mass. Gen. Laws, chapter 93A. In a demand letter that was attached to the Arbitration Demand, Mr. Grindle asserted losses in the amount of $15 million, representing the value of the 1,563,851 shares of the Company's stock as of January 2, 2002. The Company believes that Mr. Grindle's claims are without merit and intends to defend them vigorously. The Company also believes that Mr. Grindle's claims are barred by the terms of certain releases executed by him and further barred by the applicable statutes of limitation. We believe that the defense of these claims could involve significant litigation-related expenses, but that it will not have a material adverse effect on our business, financial condition or results of operations. If claims for injunctive relief or other damages are decided against us, we could suffer monetary damages.

Our competitors and potential competitors may develop products and technologies that are more effective or commercially attractive than our products. We expect to encounter increased competition from both established and development-stage companies that continually enter our market. We anticipate that these competitors will include:

- companies developing and marketing life sciences research tools,
- health care companies that manufacture laboratory-based tests and analyzers,
- diagnostic and pharmaceutical companies and
- companies developing drug discovery technologies.

Currently, our principal competition comes from established companies that provide products that perform many of the same functions for which we market our products. Our competitors may develop or market products that are more effective or commercially attractive than our current or future products. Many of our competitors have substantially greater financial, operational, marketing and technical resources than we do. Moreover, these competitors may offer broader product lines and tactical discounts, and may have greater name recognition. In addition, we may face competition from new entrants into our field. We may not have the financial resources, technical expertise or marketing, distribution or support capabilities to compete successfully in the future.

If we are unable to effectively protect our intellectual property, third parties may use our technology, which would impair our ability to compete in our markets. Our continued success will depend in significant part on our ability to obtain and maintain meaningful patent protection for our products throughout the world. Patent law relating to the scope of claims in the technology fields in which we operate is still evolving. The degree of future protection for our proprietary rights is uncertain. We own eleven U.S. patents and have eight patent applications pending in the U.S. We also own numerous U.S. registered trademarks and trade names and have applications for the registration of trademarks and trade names pending. We rely on patents to protect a significant part of our intellectual property and to enhance our competitive position. However, our presently pending or future patent applications may not issue as patents, and any patent previously issued to us may be challenged, invalidated, held unenforceable or circumvented. Furthermore, the claims in patents which have been issued or which may be issued to us in the future may not be sufficiently broad to prevent third parties from producing competing products similar to our products. In addition, the laws of various foreign countries in which we compete may not protect our intellectual property to the same extent as do the laws of the United States. If we fail to obtain adequate patent protection for our proprietary technology, our ability to be commercially competitive will be materially impaired.

In addition to patent protection, we also rely on protection of trade secrets, know-how and confidential and proprietary information. To maintain the confidentiality of trade-secrets and proprietary information, we generally seek to enter into confidentiality agreements with our employees, consultants and strategic partners upon the commencement of a relationship with us. However, we may not obtain these agreements in all circumstances. In the event of unauthorized use or disclosure of this information, these agreements, even if obtained, may not provide meaningful protection for our trade-secrets or other confidential information. In addition, adequate remedies may not exist in the event of unauthorized use or disclosure of this information. The loss or exposure of our trade secrets and other proprietary information would impair our competitive advantages and could have a material adverse effect on our operating results, financial condition and future growth prospects.

We may be involved in lawsuits to protect or enforce our patents that would be expensive and time-consuming. In order to protect or enforce our patent rights, we may initiate patent litigation against third parties. We may also become subject to interference proceedings conducted in the patent and trademark offices of various countries to determine the priority of inventions. Several of our products are based on patents that are closely surrounded by patents held by competitors or potential competitors. As a result, we believe there is a greater likelihood of a patent dispute than would be expected if our patents were not closely surrounded by other patents. The defense and prosecution, if necessary, of intellectual property suits, interference proceedings and related legal and administrative proceedings would be costly and divert our technical and management personnel from their normal responsibilities.

We may not prevail in any of these suits. An adverse determination of any litigation or defense proceedings could put our patents at risk of being invalidated or interpreted narrowly and could put our patent applications at risk of not issuing.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. For example, during the course of this kind of litigation, there could be public announcements of the results of hearings, motions or other interim proceedings or developments in the litigation. Securities analysts or investors may perceive these announcements to be negative, which could cause the market price of our stock to decline.

Our success will depend partly on our ability to operate without infringing on or misappropriating the intellectual property rights of others. We may be sued for infringing on the intellectual property rights of others, including the patent rights, trademarks and trade names of third parties. Intellectual property litigation is costly and the outcome is uncertain. If we do not prevail in any intellectual property litigation, in addition to any damages we might have to pay, we could be required to stop the infringing activity, or obtain a license to or design around the intellectual property in question. If we are unable to obtain a required license on acceptable terms, or are unable to design around any third party patent, we may be unable to sell some of our products and services, which could result in reduced revenue.

AmiKa Corporation, whose assets we purchased in July 2000, received and responded to correspondence from counsel to a third party competitor regarding the possible infringement by it of a patent and other pending patent applications held by such third party. Because this competitor has not pursued this matter since AmiKa's reply on June 7, 2000 in which AmiKa stated that it did not believe it was infringing on this competitor's patents, we believe that this matter has been concluded. However, we cannot assure you that this third party competitor will not assert these or similar claims in the future. We do not currently derive a significant portion of our revenue from products which depend on the intellectual property related to this alleged infringement.

Changes in accounting for goodwill amortization may have a material adverse affect on us. We have historically amortized goodwill purchased in our acquisitions on a straight-line basis ranging from 5 to 15 years. Upon the adoption of SFAS No. 142, "*Goodwill and Other Intangible Assets*", goodwill and intangible assets with indefinite lives from acquisitions after June 30, 2001 and existing as of December 31, 2001 will not be amortized, but instead will be evaluated annually to determine whether any portion of the remaining balance of goodwill may not be recoverable. If it is determined in the future that a portion of our goodwill is impaired, we will be required to write off that portion of our goodwill which could have an adverse effect on our net income for the period in which the write off occurs. At December 31, 2001, we had unamortized goodwill and intangible assets with indefinite lives of approximately $24.0 million, or 27% of total assets.

We are dependent upon our licensed technologies and may need to obtain additional licenses in the future to offer our products and remain competitive. We have licensed key components of our technologies from third parties. While we do not currently derive a material portion of our revenue from products that depend on these licensed technologies, we may in the future. If our license agreements were to terminate prematurely or if we breach the terms of any licenses or otherwise fail to maintain our rights to these technologies, we may lose the right to manufacture or sell our products that use these licensed technologies. In addition, we may need to obtain licenses to additional technologies in the future in order to keep our products competitive. If we fail to license or otherwise acquire necessary technologies, we may not be able to develop new products that we need to remain competitive.

Many of our current and potential customers are from the pharmaceutical and biotechnology industries and are subject to risks faced by those industries. We derive a substantial portion of our revenues from pharmaceutical and biotechnology companies. We expect that pharmaceutical and biotechnology companies will continue to be our major source of revenues for the foreseeable future. As a result, we are subject to risks and uncertainties that affect the pharmaceutical and biotechnology industries, such as pricing pressures as third-party payers continue challenging the pricing of medical products and services, government regulation, ongoing consolidation and uncertainty of technological change, and to reductions and delays in research and development expenditures by companies in these industries. In particular, several proposals are being contemplated by lawmakers in the United States to extend the federal Medicare program to include reimbursement for prescription drugs. Many of these proposals involve negotiating decreases in prescription drug prices or imposing price controls on prescription drugs. If appropriate reimbursement cannot be obtained, it could result in our customers purchasing fewer products from us as they reduce their research and development expenditures.

In addition, we are dependent, both directly and indirectly, upon general health care spending patterns, particularly in the research and development budgets of the pharmaceutical and biotechnology industries, as well as upon the financial condition of various governments and government agencies. Many of our customers, including universities, government research laboratories, private foundations and other institutions, obtain funding for the purchase of our

products from grants by governments or government agencies. There exists the risk of a potential decrease in the level of governmental spending allocated to scientific and medical research which could substantially reduce or even eliminate these grants. If government funding necessary to purchase our products were to decrease, our business and results of operations could be materially adversely affected.

Our business could be subject to the effects of a generally weakened global economy. The global economy, including the U.S. economy, is much weaker now than it has been in recent history, and as a result our business is subject to the associated risks. We do not believe that our business has suffered materially from the recent economic downturn, however we cannot guarantee that it will not suffer in the future. If the general condition of both the global economy and the U.S. economy persists or worsens, we may experience parts shortages if our suppliers are negatively impacted by the weakened economy. This may in turn cause us to lose revenues from not being able to supply products to our customers. We may also experience a loss of revenues if our customers reduce spending in response to the state of the economy. Additionally, our stock price could be significantly impacted by a continued weakened or worsening economy simply by the nature of the market.

Our business is subject to risks associated with significant acts of terrorism. Prior to September 11, 2001, acts of terrorism such as occurred on that day were unprecedented in the U.S. and around the world. Since September 11, 2001, it has become evident that such acts are indeed possible and could cause significant disruption and harm, to not only our business, but to the businesses of all our customers and suppliers both within the U.S. and around the rest of the world. We cannot guarantee that another such event will not adversely impact our ability to continue to operate.

Our business is subject to economic political and other risks associated with international revenues and operations. Since we manufacture and sell our products worldwide, our business is subject to risks associated with doing business internationally. Our revenues from our non-U.S. operations represented approximately 60% of our total revenues for the year ended December 31, 2001. We anticipate that revenue from international operations will continue to represent a substantial portion of our total revenues. In addition, a number of our manufacturing facilities and suppliers are located outside the United States. Accordingly, our future results could be harmed by a variety of factors, including:

- changes in foreign currency exchange rates, which resulted in a foreign current loss of approximately $100,000 and a reduction of foreign equity of approximately $235,000 for the year ended December 31, 2001,
- changes in a specific country's or region's political or economic conditions, including Western Europe, in particular,
- potentially negative consequences from changes in tax laws affecting our ability to expatriate profits,
- difficulty in staffing and managing widespread operations and
- unfavorable labor regulations applicable to our European operations, such as the unenforceability of non-competition agreements in the United Kingdom.

Our quarterly revenues will likely be affected by various factors, including the seasonal nature of purchasing in Europe and the timing of capital equipment purchases by customers. Our revenues may vary from quarter to quarter due to a number of factors, including the timing of catalog mailings and new product introductions, future acquisitions and our substantial sales to European customers, who in summer months often defer purchases. Therefore, we expect our revenues from European sales to be lower during the summer season and as a result our quarter-to-quarter revenues will likely experience fluctuations. With the acquisition of Union Biometrica in May 2001, an increasing portion of our revenues may result from sales of relatively high priced products. Delays in receipt, manufacture, shipment or receivables collection of these relatively high priced products could lead to substantial variability in revenues, operating results and working capital requirements from quarter-to-quarter, which could adversely affect our stock price.

We may lose money when we exchange foreign currency received from international revenues into U.S. dollars. For the year ended December 31, 2001, approximately 60% of our business was conducted in currencies other than the U.S. dollar, which is our reporting currency. As a result, currency fluctuations among the U.S. dollar and the currencies in which we do business have caused and will continue to cause foreign currency transaction gains and losses. Currently, we attempt to manage foreign currency risk through the matching of assets and liabilities. In the future, we may undertake to manage foreign currency risk through additional hedging methods. We recognize foreign currency gains or losses arising from our operations in the period incurred. We cannot guarantee that we will be successful in managing foreign currency risk or in predicting the effects of exchange rate fluctuations upon our future operating results because of the number of currencies involved, the variability of currency exposure and the potential volatility of currency exchange rates.

If we engage in any acquisition, we will incur a variety of costs, and may never realize the anticipated benefits of the acquisition. Our business strategy includes the future acquisition of businesses, technologies, services or products that we believe are a strategic fit with our business. If we do undertake any acquisition, the process of integrating an

acquired business, technology, service or product may result in unforeseen operating difficulties and expenditures and may absorb significant management attention that would otherwise be available for ongoing development of our business. Moreover, we may fail to realize the anticipated benefits of any acquisition. Future acquisitions could reduce our stockholders' ownership and could cause us to incur debt, expose us to future liabilities and result in amortization expenses related to intangible assets.

If we fail to retain our key personnel and hire, train and retain qualified employees, we may not be able to compete effectively, which could result in reduced revenue. Our success is highly dependent on the continued services of key management, technical and scientific personnel. Our management and other employees may voluntarily terminate their employment with us at any time upon short notice. The loss of the services of any member of our senior management team, including our Chief Executive Officer, Chane Graziano, and our President, David Green, or any of our technical or scientific staff may significantly delay or prevent the achievement of product development and other business objectives. We maintain key person life insurance on Messrs. Graziano and Green. Our future success will also depend on our ability to identify, recruit and retain additional qualified scientific, technical and managerial personnel. Competition for qualified personnel in the technology area is intense, and we operate in several geographic locations where labor markets are particularly competitive, including Boston, Massachusetts and London and Cambridge, England, and where demand for personnel with these skills is extremely high and is likely to remain high. As a result, competition for qualified personnel is intense, particularly in the areas of information technology, engineering and science and the process of hiring suitably qualified personnel is often lengthy. If we are unable to hire and retain a sufficient number of qualified employees, our ability to conduct and expand our business could be seriously reduced.

We plan significant growth, and there is a risk that we will not be able to manage this growth. Our success will depend on the expansion of our operations. Effective growth management will place increased demands on our management, operational and financial resources. To manage our growth, we must expand our facilities, augment our operational, financial and management systems, and hire and train additional qualified personnel. Our failure to manage this growth effectively could impair our ability to generate revenue or could cause our expenses to increase more rapidly than revenue, resulting in operating losses.

Because our stock price may become highly volatile, our stock price could experience substantial declines and our management's attention may be diverted from more productive tasks. The market price of our common stock may become volatile and could decline, perhaps substantially, in response to various factors, many of which are beyond our control, including:

- technological innovations by competitors or in competing technologies,
- revenues and operating results fluctuating or failing to meet the expectations of securities analysts or investors in any quarter,
- downward revisions in securities analysts' estimates,
- conditions or trends in the biotechnology and pharmaceutical industries,
- announcements by us of significant acquisitions or financings or changes in strategic partnerships and
- a decrease in the demand for our common stock.

In addition, the stock market in general, and the Nasdaq National Market and the biotechnology industry market in particular, have experienced significant price and volume fluctuations that at times have been unrelated or disproportionate to the operating performance of those companies. These broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance. In the past, securities class action litigation has often been instituted following periods of volatility in the market price of a company's securities. A securities class action suit against us could result in substantial costs, potential liabilities and the diversion of our management's attention and resources.

Provisions of Delaware law and of our charter and by-laws may make a takeover more difficult which could cause our stock price to decline. Provisions in our certificate of incorporation and by-laws and in the Delaware corporate law may make it difficult and expensive for a third party to pursue a tender offer, change in control or takeover attempt which is opposed by our management and board of directors. Public stockholders who might desire to participate in such a transaction may not have an opportunity to do so. We also have a staggered board of directors that makes it difficult for stockholders to change the composition of the board of directors in any one year. These anti-takeover provisions could substantially impede the ability of public stockholders to change our management and board of directors. Such provisions may also limit the price that investors might be willing to pay for shares of our common stock in the future.

Failure to raise additional capital or generate the significant capital necessary to expand our operations and invest in new products could reduce our ability to compete and result in lower revenue. We anticipate that our existing capital resources and the net proceeds from our initial public offering will enable us to maintain currently planned operations for the foreseeable future. However, we premise this expectation on our current operating plan, which may change as a result of many factors, including market acceptance of our new products and future opportunities with collaborators. Consequently, we may need additional funding sooner than anticipated. Our inability to raise capital could seriously harm our business and product development efforts.

If we raise additional funds through the sale of equity or convertible debt or equity-linked securities, existing percentages of ownership in the company will be reduced. In addition, these transactions may dilute the value of our outstanding stock. We may issue securities that have rights, preferences and privileges senior to our common stock. If we raise additional funds through collaborations or licensing arrangements, we may relinquish rights to certain of our technologies or products, or grant licenses to third parties on terms that are unfavorable to us. We may be unable to raise additional funds on terms acceptable to us. If future financing is not available to us or is not available on terms acceptable to us, we may have to curtail or cease operations.

Future issuance of our preferred stock may dilute the rights of our common stockholders. Our board of directors has the authority to issue up to 5,000,000 shares of preferred stock and to determine the price, privileges and other terms of these shares. The board of directors may exercise this authority without any further approval of our stockholders. The rights of the holders of common stock may be adversely affected by the rights of future holders of our preferred stock.

Cash dividends will not be paid on our common stock. We intend to retain all of our earnings to finance the expansion and development of our business and do not anticipate paying any cash dividends in the foreseeable future. As a result, capital appreciation, if any, of our common stock will be our stockholders' sole source of gain for the foreseeable future.

An active trading market for our common stock may not be sustained. Although our common stock is quoted on the Nasdaq National Market, an active trading market for our shares may not be sustained.

Quantitative and Qualitative Disclosures about Market Risk

We manufacture and test the majority of products in research centers in the United States, the United Kingdom, Germany and Austria. We sell our products globally through our direct catalog sales, direct sales force and indirect distributor channels. As a result, our financial results are affected by factors such as changes in foreign currency exchange rates and weak economic conditions in foreign markets.

We collect amounts representing a substantial portion of our revenues and pay amounts representing a substantial portion of our operating expenses in foreign currencies. As a result, changes in currency exchange rates from time to time may affect our operating results. Historically, we have not hedged our foreign currency position. Currently, we attempt to manage foreign currency risk through the matching of assets and liabilities. However, as our sales expand internationally, we plan to evaluate currency risks and we may enter into foreign exchange contracts from time to time to mitigate foreign currency exposure.

INDEPENDENT AUDITORS' REPORT

The Board of Directors

Harvard Bioscience, Inc.:

We have audited the accompanying consolidated balance sheets of Harvard Bioscience, Inc. and subsidiaries (the "Company") as of December 31, 2001 and 2000, and the related consolidated statements of operations, stockholders' equity (deficit) and comprehensive loss, and cash flows for each of the years in the three-year period ended December 31, 2001. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

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

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Harvard Bioscience, Inc. and subsidiaries as of December 31, 2001 and 2000, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2001, in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 2 to the consolidated financial statements, effective July 1, 2001, the Company adopted the provisions of Statement of Financial Accounting Standards ("SFAS") 141, "Business Combinations" and certain provisions of SFAS 142, "Goodwill and Other Intangible Assets" as required for goodwill and intangible assets resulting from business combinations consummated after June 30, 2001.

/s/ KPMG LLP

February 15, 2002

Boston, Massachusetts

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

Consolidated Balance Sheets

	December 31, 2001	2000
Assets		
Current assets:		
Cash and cash equivalents (note 6)	$ 29,385,455	$ 35,816,994
Trade accounts receivable, net of reserve for uncollectible accounts of $97,597 and $88,955 at December 31, 2001 and 2000, respectively, (note 18)	6,490,189	4,697,663
Other receivable and other assets	1,114,142	1,237,414
Inventories (note 4)	5,972,708	3,722,180
Catalog costs	243,878	453,209
Prepaid expenses	700,227	478,562
Deferred tax asset (note 12)	846,291	513,458
Total current assets	44,752,890	46,919,480
Property, plant and equipment, net (notes 5 and 9)	3,505,742	1,715,726
Other assets:		
Catalog costs, less current portion	60,225	105,182
Deferred tax asset (note 12)	256,131	57,478
Goodwill and other intangibles, net of accumulated amortization of $2,743,908 and $1,000,087 at December 31, 2001 and 2000, respectively (note 3)	33,194,508	9,562,385
Other assets (note 11)	592,275	448,273
Total other assets	34,103,139	10,173,318
Total assets	$ 82,361,771	$ 58,808,524
Current liabilities:		
Current installments of long-term debt (note 6)	$ 3,894,088	$ 6,644
Trade accounts payable	3,100,414	2,117,446
Deferred revenue	599,535	—
Accrued income taxes payable	1,442,311	669,788
Accrued expenses (note 16)	2,912,201	3,305,560
Other liabilities	207,339	268,075
Total current liabilities	12,155,888	6,367,513
Long-term debt, less current installments (note 6)	637,153	1,142
Deferred income tax liability (note 12)	2,756,861	104,946
Total long-term liabilities	3,394,014	106,088
Total liabilities	15,549,902	6,473,601
Stockholders' equity (notes 7,8,13 and 19):		
Common stock, par value $.01 per share, 80,000,000 shares authorized; 31,339,373 and 29,442,632 shares issued and outstanding at December 31, 2001 and 2000, respectively	313,394	294,426
Additional paid-in-capital – stock options	5,837,474	4,635,949
Additional paid-in-capital – common stock	147,455,103	128,594,672
Accumulated deficit	(83,588,285)	(78,379,867)
Accumulated other comprehensive loss	(789,134)	(554,573)
Notes receivable	(1,748,938)	(1,587,939)
Treasury stock, 4,660,784 common shares, at cost	(667,745)	(667,745)
Total stockholders' equity	66,811,869	52,334,923
Total liabilities and stockholders' equity	$ 82,361,771	$ 58,808,524

See accompanying notes to consolidated financial statements.

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

Consolidated Statements of Operations

	Years Ended December 31, 2001	2000	1999
Product revenues	$ 40,005,442	$ 30,574,800	$ 26,177,814
Research revenues	862,945	—	—
Total revenues (notes 14 and 18)	40,868,387	30,574,800	26,177,814
Costs and expenses:			
Cost of product revenue	20,179,762	15,833,338	13,546,933
General and administrative expense	7,000,638	5,181,299	4,146,564
Severance and other related costs	459,925	—	—
Sales and marketing expense	4,840,468	3,185,340	2,448,505
Research and development expense	3,178,591	1,532,896	1,187,584
Stock compensation expense	2,678,743	14,675,299	3,283,164
In-process research and development expense (note 3)	5,447,000	—	—
Amortization of goodwill and other intangibles	1,743,821	604,191	368,235
Operating (loss) income	(4,660,561)	(10,437,563)	1,196,829
Other income (expense) income:			
Foreign currency loss	(99,566)	(324,153)	(47,982)
Common stock warrant interest expense (note 8)	—	(36,884,915)	(29,694,019)
Interest expense	(6,869)	(916,210)	(679,122)
Interest income	1,358,554	159,849	22,767
Amortization of deferred financing costs	—	(152,683)	(63,442)
Other	(10,023)	45,291	(17,468)
Other income (expense), net	1,242,096	(38,072,821)	(30,479,266)
Loss before income taxes	(3,418,465)	(48,510,384)	(29,282,437)
Income taxes (note 12)	1,789,953	1,359,401	137,480
Net loss	(5,208,418)	(49,869,785)	(29,419,917)
Accrual of preferred stock dividends	—	(136,151)	(156,586)
Net loss available to common shareholders	$ (5,208,418)	$ (50,005,936)	$ (29,576,503)
Loss per share (note 15):			
Basic	$ (0.20)	$ (6.25)	$ (5.28)
Diluted	$ (0.20)	$ (6.25)	$ (5.28)
Weighted average common shares:			
Basic	25,784,852	8,005,386	5,598,626
Diluted	25,784,852	8,005,386	5,598,626

See accompanying notes to consolidated financial statements.

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

Consolidated Statements of Stockholders' Equity (Deficit) and Comprehensive Loss

	Number Of shares Outstanding	Common Stock	Additional Paid-in Capital - Stock Options	Additional Paid-in Capital - Common Stock	Retained Earnings (Accumulated Deficit)	Accumulated Other Comprehensive Loss	Notes Receivable	Treasury Stock	Total Stockholders' Equity (Deficit)
Balance at December 31, 1998	10,259,410	$ 102,604	$ —	$ —	$ 1,277,398	$ (34,720)	$ —	$ (667,745)	$ 677,537
Preferred stock dividends		—	—	—	(156,586)	—	—	—	(156,586)
Preferred stock issuance costs		—	—	—	(74,826)	—	—	—	(74,826)
Stock compensation expense		—	3,283,164	—	—	—	—	—	3,283,164
Comprehensive loss:									
Net loss		—	—	—	(29,419,917)	—	—	—	(29,419,917)
Translation adjustments		—	—	—	—	(19,970)	—	—	(19,970)
Total comprehensive loss									(29,439,887)
Balance at December 31, 1999	10,259,410	102,604	3,283,164	—	(28,373,931)	(54,690)	—	(667,745)	(25,710,598)
Preferred stock dividends		—	—	—	(136,151)	—	—	—	(136,151)
Issuance of common stock									
Initial public offering	6,250,000	62,500	—	44,731,292	—	—	—	—	44,793,792
Preferred stock conversion	955,935	9,559	—	990,441	—	—	—	—	1,000,000
Common stock warrants	8,509,333	85,093	—	67,994,187	—	—	—	—	68,079,280
Stock option exercises	3,467,954	34,670	(13,322,514)	14,878,752	—	—	(1,587,939)	—	2,969
Stock compensation expense		—	14,675,299	—	—	—	—	—	14,675,299
Comprehensive loss:									
Net loss		—	—	—	(49,869,785)	—	—	—	(49,869,785)
Translation adjustments		—	—	—	—	(499,883)	—	—	(499,883)
Total comprehensive loss									(50,369,668)
Balance at December 31, 2000	29,442,632	294,426	4,635,949	128,594,672	(78,379,867)	(554,573)	(1,587,939)	(667,745)	52,334,923
Issuance of common stock									
Underwriters overallotment	937,500	9,375	—	6,964,735	—	—	—	—	6,974,110
Business acquisitions	659,282	6,593	2,781,222	7,140,024	—	—	—	—	9,927,839
Stock option exercises	288,075	2,881	(4,419,439)	4,653,564	—	—	—	—	237,006
Stock purchase plan	11,884	119	—	102,108	—	—	—	—	102,227
Stock compensation expense		—	2,678,743	—	—	—	—	—	2,678,743
Accrued interest shareholder note		—	160,999	—	—	—	(160,999)	—	—
Comprehensive loss:									
Net loss		—	—	—	(5,208,418)	—	—	—	(5,208,418)
Translation adjustments		—	—	—	—	(234,561)	—	—	(234,561)
Total comprehensive loss									(5,442,979)
Balance at December 31, 2001	31,339,373	$ 313,394	$ 5,837,474	$147,455,103	$ (83,588,285)	$ (789,134)	$ (1,748,938)	$ (667,745)	$66,811,869

See accompanying notes to consolidated financial statements.

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

Consolidated Statements of Cash Flows

	Years Ended December 31, 2001	2000	1999
Cash flows from operating activities:			
Net loss	$ (5,208,418)	$(49,869,785)	$(29,419,917)
Adjustments to reconcile net loss to net cash provided by operating activities:			
Common stock warrant interest expense	—	36,884,915	29,694,019
Stock compensation expense	2,678,743	14,675,299	3,283,164
In-process research and development expense	5,447,000	—	—
Impairment loss on write down of intangible assets	162,090	—	—
Depreciation	622,090	393,357	331,822
Amortization of catalog costs	605,108	340,037	493,428
Loss (gain) on sale of fixed assets	(36)	(2,207)	7,584
Provision for bad debts	8,978	2,430	26,877
Amortization of goodwill and other intangibles	1,743,821	604,191	368,235
Amortization and write-off of deferred financing costs	—	152,683	63,442
Deferred income taxes	(193,628)	927,665	(1,310,325)
Changes in operating assets and liabilities, net of effects of business acquisitions:			
(Increase) decrease in accounts receivable	(691,318)	(737,414)	(2,282,344)
(Increase) decrease in other receivables	37,433	(1,045,776)	(113,949)
(Increase) decrease in inventories	(637,426)	(737,737)	215,152
(Increase) decrease in prepaid expenses and other assets	11,272	85,555	(260,285)
(Increase) decrease in other assets	396,962	(108,492)	(202,460)
Increase (decrease) in trade accounts payable	(47,727)	324,672	541,065
Increase (decrease) in accrued income taxes payable	631,716	(225,672)	797,633
Increase in accrued expenses	234,614	442,794	666,637
Decrease in deferred revenue	(1,204,386)	—	—
Increase (decrease) in other liabilities	(501,857)	39,395	26,663
Net cash provided by operating activities	4,095,032	2,145,810	2,926,441
Cash flows from investing activities:			
Additions to property, plant and equipment	(1,838,851)	(629,518)	(332,474)
Additions to catalog costs	(358,402)	(673,811)	(121,644)
Proceeds from sales of fixed assets	5,626	2,658	34,566
Acquisition of businesses, net of cash acquired	(17,984,128)	(4,031,625)	(8,126,656)
Net cash used in investing activities	(20,175,755)	(5,332,296)	(8,546,208)
Cash flows from financing activities:			
Proceeds from short-term debt	—	1,600,000	2,300,000
Repayments of short-term debt	—	(3,800,000)	(1,150,000)
Proceeds from long-term debt	4,325,519	2,000,000	5,500,000
Repayments of long-term debt	(507,395)	(7,859,328)	(460,663)
Dividends paid	—	(171,072)	(121,666)
Net proceeds from issuance of preferred stock	—	—	925,174
Redemption of preferred stock	—	(1,500,000)	—
Net proceeds from issuance of common stock	5,880,318	46,250,994	—
Net cash provided by financing activities	9,698,442	36,520,594	6,992,845
Effect of exchange rate changes on cash	(49,258)	86,833	66,204
Increase (decrease) in cash and cash equivalents	(6,431,539)	33,420,941	1,439,282
Cash and cash equivalents at the beginning of year	35,816,994	2,396,053	956,771
Cash and cash equivalents at the end of year	$ 29,385,455	$ 35,816,994	$ 2,396,053
Non cash investing and financing activity:			
Common stock and options issued for acquisition	$ 9,927,839	—	—
Supplemental disclosures of cash flow information:			
Cash paid for interest	$ 6,600	$ 1,008,673	$ 671,452
Cash paid for income taxes	$ 729,886	$ 1,571,192	$ 686,675

See accompanying notes to consolidated financial statements.

(1) Organization

On March 15, 1996, HAI Acquisition Corp. and its subsidiary, Guell Limited, purchased certain assets and assumed certain liabilities of the former Harvard Apparatus, Inc. and its subsidiary in the United Kingdom, Harvard Apparatus, Ltd. (the "Purchase") for cash consideration of approximately $3,342,000 (including $342,000 of acquisition related expenses). After the date of the Purchase, HAI Acquisition Corp. and Guell Limited legally changed their names to Harvard Apparatus, Inc. and Harvard Apparatus, Ltd., respectively. On November 29, 2000, Harvard Apparatus, Inc. changed its name to Harvard Bioscience, Inc.

We are a provider of innovative, enabling tools for drug discovery research at pharmaceutical and biotechnology companies, universities and government research laboratories. We focus on critical bottlenecks in the drug discovery process - target validation, assay development and ADMET screening. Our ADMET screening products enables our customers to test drug candidates to determine their absorption, distribution, metabolism, elimination and toxicology properties prior to conducting costly clinical trials.

(2) Summary of Significant Accounting Policies

(a) Principles of Consolidation

The consolidated financial statements include the accounts of Harvard Bioscience, Inc. and its wholly-owned subsidiaries (the "Company"). All intercompany balances and transactions have been eliminated in consolidation.

(b) Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires the use of management's estimates. Such estimates include the determination and establishment of certain accruals and provisions, including those for inventory obsolescence, catalog cost amortization periods, tax and reserves for bad debts. Actual results could differ from those estimates.

(c) Cash and Cash Equivalents

For purposes of the consolidated statements of cash flows, the Company considers all highly liquid instruments with original maturities of three months or less to be cash equivalents.

(d) Inventories

Inventories are stated at the lower of cost or market. Cost is determined using the first-out (FIFO) method.

(e) Property, Plant and Equipment

Property, plant and equipment are stated at cost. Equipment under capital leases is stated at the present value of the minimum lease payments at the lease agreement date. Property, plant and equipment is depreciated using the straight-line method over the estimated useful lives of the assets as follows:

Buildings	40 years
Machinery and equipment	3-10 years
Computer equipment	3-7 years
Furniture and fixtures	5-10 years
Automobiles	4-6 years

Property and equipment held under capital leases and leasehold improvements are amortized straight line over the shorter of the lease term or estimated useful life of the asset. Amortization of assets held under capital leases is included with depreciation expense.

(f) Catalog Costs

Significant costs of product catalog design, development and production are capitalized and amortized over the expected useful life of the catalog (usually one to three years). Costs of drawings and design that were acquired at the purchase on March 15, 1996 are being amortized over their estimated useful life of seven years.

(g) Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to be applied to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

(h) Foreign Currency Translation

All assets and liabilities of the Company's foreign subsidiaries are translated at exchange rates in effect at year-end. Income and expenses are translated at rates which approximate those in effect on the transaction dates. The resulting translation adjustment is recorded as a separate component of stockholders' equity in accumulated other comprehensive loss in the consolidated balance sheets.

(i) Stock Based Compensation

The Company accounts for stock-based employee compensation arrangements in accordance with the provisions of Accounting Principle Board Opinion No. 25, *Accounting for Stock Issued to Employees* (APB No. 25) and complies with the disclosure provisions of SFAS No. 123, *Accounting for Stock-Based Compensation*. Under APB 25, compensation cost is recognized based on the difference, if any, on the date of grant between the fair value of the Company's stock and the amount an employee must pay to acquire the stock.

(j) Income (Loss) Per Share

Basic income (loss) per share is computed by dividing the net income (loss) available to common shareholders by the weighted average number of shares of common stock outstanding during the periods presented. The computation of diluted income per share is similar to the computation of basic income per share, except that the denominator is increased for the assumed exercise of dilutive options and other potentially dilutive securities using the treasury stock method unless the effect is antidilutive. For all periods presented, diluted loss per share is the same as basic loss per share as the inclusion of common stock equivalents would be antidilutive.

(k) Comprehensive Income (Loss)

The Company follows SFAS No. 130, *Reporting Comprehensive Income (Loss)*. SFAS No. 130 requires companies to report all changes in equity during a period, resulting from net income (loss) and transactions from non-owner sources, in a financial statement in the period in which they are recognized.

The Company has chosen to disclose comprehensive income (loss), which encompasses net loss and foreign currency translation adjustments, in the consolidated statements of stockholders' equity (deficit).

(l) Revenue Recognition

The Company recognizes revenue from product sales at the time of shipment or installation when applicable. Product returns are estimated and provided for based on historical experience. For long term collaboration agreements, revenue is recognized based on the costs incurred, which are included as part of research and development expense, as the related work on the contracts progress.

(m) Goodwill and Other Intangibles

Goodwill, which represents the excess of purchase price over fair value of net assets acquired, is amortized on a straight-line basis over the expected periods to be benefited, ranging from 5 to 15 years. At December 31, 2001 and December 31, 2000, goodwill totaled $22.2 million and $9.6 million, net of accumulated amortization of $2.1 million and $1.0 million, respectively.

At December 31, 2001, other intangible assets consist of acquired technologies of $8.5 million, workforce in place of $1.5 million, and trademarks of $1.0 million, respectively, net of accumulated amortization of $0.6 million. At December 31, 2000, there were no corresponding balances. Other intangibles are amortized on a straight line basis over the expected periods to be benefited , as follows: acquired technologies, 10 years; workforce in place and trademarks, 15 years.

The Company continually evaluates whether events or circumstances have occurred that indicate that the remaining useful life of goodwill and other intangibles may warrant revision or that the remaining balance may not be recoverable. When factors indicate that goodwill and other intangibles should be evaluated for possible impairment, the Company estimates the undiscounted cash flow of the acquired asset over its remaining life in determining whether the asset is recoverable. Charges for impairment of goodwill and other intangibles would be recorded to the extent unamortized book value exceeds the related future discounted cash flow. The discount factor would be the long-term debt rate currently obtainable by the Company.

(n) Impairment of Long-Lived Assets and Long-Lived Assets to be Disposed Of

The Company uses the provisions of SFAS No. 121, *Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of*. This statement requires that long-lived assets and certain identifiable intangibles be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to undiscounted future net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. Assets to be disposed of are reported at the lower of the carrying amount or fair value less costs to sell.

(o) Fair Value of Financial Instruments

The carrying value of the Company's cash and cash equivalents, trade accounts receivable, trade accounts payable and accrued expenses approximate their fair values because of the short maturities of those instruments. The fair value, which approximates the carrying amount of the Company's long-term debt, is based on the amount of future cash flows associated with the debt discounted using the Company's current borrowing rate for similar debt instruments of comparable maturity.

(p) Recently Issued Accounting Pronouncements

In June 2001, SFAS 141, "*Business Combinations*" was issued. SFAS No. 141, which is effective for acquisitions initiated after June 30, 2001, prohibits the use of pooling of interests method of accounting for business combinations and amends the accounting and financial reporting requirements for business combinations accounted for by the purchase method. SFAS No. 141 establishes the criteria that intangible assets acquired in a purchase method business combination must meet to be recognized and reported apart from goodwill. The Company has adopted SFAS No. 141 for all business combinations initiated after June 30, 2001. Goodwill and intangible assets determined to have an indefinite useful life acquired in a purchase business combination completed after June 30, 2001 will not be amortized, but will continue to be evaluated for impairment. Goodwill and intangible assets acquired in business combinations completed before July 1, 2001 will continue to be amortized and tested for impairment prior to the full adoption of SFAS No. 142, "*Goodwill and Other Intangible Assets*".

In June 2001, SFAS No. 142, "*Goodwill and Other Intangible Assets*" was issued. SFAS No. 142, addresses financial accounting and reporting for acquired goodwill and other intangible assets. Among other things, SFAS No. 142 requires that goodwill and intangible assets with indefinite useful lives no longer be amortized, but rather be tested annually for impairment. This statement is effective for fiscal years beginning after December 15, 2001. Accordingly, the Company adopted SFAS No. 142 on January 1, 2002 and will cease to recognize approximately $1.5 million of goodwill amortization expense in 2002. At December 31, 2001, the Company has goodwill and intangibles with indefinite future lives of approximately $24 million on its consolidated balance sheet.

In June 2001, SFAS No. 143, "*Accounting for Assets Retirement Obligations*" was issued. SFAS No. 143 applies to legal obligations associated with the retirement of certain tangible long-lived assets. This statement is effective for fiscal years beginning after June 15, 2002. Accordingly, the Company will adopt SFAS No. 143 on January 1, 2003. The Company does not expect that the adoption of this statement will have a material impact on consolidated results of operations or financial position.

In August 2001, SFAS No. 144, "*Accounting for the Impairment or Disposal of Long-Lived Assets*" was issued. This statement addresses the financial accounting and reporting for the impairment or disposal of long-lived assets. It supersedes SFAS No. 121, "*Accounting for the Impairment of Long Lived Assets and for Long Lived Assets to be Disposed Of*". SFAS No. 144 is effective for fiscal years beginning after December 15, 2001. Accordingly, the Company adopted SFAS No. 144 on January 1, 2002. The adoption of this statement did not have a material impact on the consolidated results of operations or financial position.

(3) Acquisition of Businesses

On February 26, 1999, the Company acquired substantially all of the assets and certain liabilities of Pharmacia Biotech (Biochrom) Ltd. ("Biochrom"), a UK manufacturer and developer of spectrophotometers, amino acid analyzers and other related research equipment. Cash consideration of approximately $6,981,000 (including $502,000 of acquisition related expenses) was paid for the assets. The costs of the acquisition allocated on the basis of estimated fair market value of the assets acquired using the purchase method of accounting resulted in an allocation of $5,446,000 to goodwill. The assets acquired consisted of approximately $61,000 of accounts receivable, $1,039,000 of inventory, $100,000 of prepaid expenses, $612,000 of fixed assets, $372,000 of pension assets and liabilities assumed totaled approximately $649,000.

On September 10, 1999, the Company acquired certain assets of Clark Electromedical Instruments, a manufacturer of glass capillaries and distributor of research equipment. Cash consideration of approximately $349,000 was paid for the assets. The costs of the acquisition allocated on the basis of estimated fair market value of the assets acquired using the purchase method of accounting resulted in an allocation of $288,000 to goodwill.

On November 19, 1999, the Company acquired the NaviCyte diffusion chamber systems product line from NaviCyte, a wholly-owned subsidiary of Trega Biosciences, Inc. Cash consideration of approximately $390,000 (including $33,000 of acquisition related expenses) was paid for the assets. The costs of the acquisition allocated on the basis of estimated fair market value of the assets acquired and the purchase method of accounting resulted in an allocation of $333,000 to goodwill.

On November 30, 1999, the Company acquired substantially all of the assets and certain liabilities of Hugo Sachs Elektronik, a developer and manufacturer of perfusion systems for research. Cash consideration of approximately $730,000 was paid for the assets (including approximately $162,000 of acquisition related expenses), net of cash acquired of $31,000. The costs of the acquisition allocated on the basis of estimated fair market value of the assets acquired and the purchase method of accounting resulted in an allocation of $251,000 to goodwill.

On May 19, 2000, the Company acquired substantially all of the assets of Biotronik, a manufacturer of Amino Acid Analyzers. Cash consideration of approximately $469,000 was paid for the assets (including approximately $12,000 of acquisition related expenses). The costs of the acquisition allocated on the basis of fair market value of the assets acquired and the purchase method of accounting resulted in an allocation of $335,000 to goodwill.

On July 14, 2000, the Company acquired substantially all of the assets of Amika Corporation, a manufacturer and distributor of sample preparation devices and consumables. Cash consideration of $3,100,000 was paid for the assets (including approximately $61,000 of acquisition related expenses). The cost of the acquisition allocated on the basis of fair market value of the assets acquired and the purchase method of accounting resulted in an allocation of $3,015,000 to goodwill. The assets acquired consisted of approximately $85,000 of inventory. In addition, the Company acquired the right of first refusal to all new technologies developed and offered for sale by the predecessor Company for a period of four years on a fair value licensing arrangement.

On December 21, 2000, the Company acquired substantially all the assets and certain liabilities of MitoScan Corporation, a manufacturer of a submitochondrial particle toxicity testing products for cash and future contingent payments based on future product revenues. Cash consideration of approximately $383,000 was paid for the assets (including approximately $83,000 of acquisition related expenses). The cost of the acquisition allocated on the basis of fair market value of assets acquired and the purchase method of accounting resulted in an allocation of approximately $386,000 to goodwill.

On May 1, 2001, the Company acquired substantially all the assets and certain liabilities of Warner Instruments Corporation ("Warner Instruments"), a developer, manufacturer and marketer of cell and tissue electro-physiology products. Cash consideration of $2,700,000 (including approximately $69,000 of acquisition related expenses) was paid for the assets. The cost of the acquisition allocation on the basis of fair market value of assets acquired and the purchase method of accounting resulted in the following allocation: current assets of $951,000, property, plant and equipment of $34,000, purchased intangibles of $1.9 million which included: trade name of $320,000, workforce in place of $380,000, acquired technologies of $1.0 million , patents of $9,000, in process research and development of $159,000 and goodwill of $136,000 and liabilities assumed of $234,000.

On May 31, 2001, the Company acquired all of the outstanding common and preferred shares of Union Biometrica, Inc. ("Union Biometrica") for $17.5 million. Union Biometrica develops, manufactures and markets instruments that enable high throughput analysis and sorting of model organisms used in drug discovery research. The transaction was accounted for using the purchase method of accounting. The aggregate purchase price of $17.5 million, net of cash acquired of $562,000, included 659,282 common shares and 263,202 common stock options that had an estimated fair value of $10 million. The purchase price which has been allocated on the basis of fair market value of assets acquired and liabilities assumed resulted in the following allocation: current assets of $0.5 million, property, plant and equipment of $0.2 million, other assets of $1.6 million, purchased intangibles of $10.1 million, which included work force in place of $1.4 million, acquired technologies of $8 million and trademarks of $0.8 million, in process research and development of $5.3 million, goodwill of $6.2 million and liabilities assumed of $6.5 million.

On June 29, 2001, Harvard Apparatus Ltd, a United Kingdom subsidiary of the Company, acquired all the stock of International Market Supply, Ltd ("IMS"), a company engaged in developing, manufacturing and marketing respiration products. Cash consideration of approximately $1,600,000 (including approximately $114,000 of acquisition related expenses) was paid for the stock. The cost of the acquisition allocation on the basis of fair market value of assets acquired and the purchase method of accounting resulted in an allocation of approximately $1,402,000 to goodwill, $462,000 to current assets, $39,000 to property, plant and equipment and $277,000 in liabilities assumed.

On November 1, 2001, Biochrom Ltd, a United Kingdom subsidiary of the Company, acquired all the stock of Scie-Plas, Ltd., a designer, manufacturer and marketer of electrophoresis tools for molecular biology. Cash consideration of $4,133,000 (including approximately $81,000 of acquisition related expenses) was paid for the stock. The Company has not finalized the allocation of purchase price as of December 31, 2001. An estimation of the allocation was prepared and included as part of these financial statements. The purchase price has been allocated as follows: $3,908,000 to goodwill and other intangibles, $327,000 to property, plant and equipment, current assets of $804,000, other assets of $23,000 and liabilities assumed of $929,000.

On December 6, 2001, Biochrom Ltd, a United Kingdom subsidiary of the Company, acquired all the stock of Asys Hitech GmbH, a designer, manufacturer and marketer of low volume, high throughput, liquid dispensers used for high throughput screening in drug discovery research. Cash consideration of $2,042,000 (including approximately $98,000 of acquisition related expenses) was paid for the stock. The Company has not finalized the allocation of purchase price as of December 31, 2001. An estimation of the allocation was prepared and has been included as part of these financial statements. The purchase price has been allocated as follows: $1,970,000 to goodwill and other intangibles, $23,000 to property, plant and equipment, current assets of $517,000, other assets of $46,000 and liabilities assumed of $514,000.

All acquisitions have been accounted for by the purchase method of accounting for business combinations. Accordingly, the accompanying consolidated statements of operations do not include any revenues or expenses related to these acquisitions prior to the respective acquisition dates.

In connection with the acquisition of Warner Instruments and Union Biometrica, certain research and development projects acquired were determined to have no alternative future use. Accordingly, $159,000 and $5,288,000, respectively, of purchased in-process research and development was expensed in the second quarter of 2001. The amount was established by identifying research projects for which technological feasibility had not been established and for which no alternative future uses existed. The value of the projects identified to be in progress were determined by estimating future cash flows from the projects once commercially feasible, discounting net cash flows back to their present value and then applying a percentage of completion to the calculated value. The discount rate used averaged 44% for the projects identified. Development of the technologies remains a substantial risk to the Company due to factors including the remaining effort to achieve technological feasibility, rapidly changing customer markets and competitive threats from other companies. Additionally, the value of other intangible assets acquired may become impaired.

The following unaudited pro forma results of operations gives effect to the acquisition of Union Biometrica as if it had occurred as of January 1, 2000. Such pro forma information reflects certain adjustments including amortization of goodwill, income tax effect and an increase in the number of weighted average shares outstanding. The pro forma information does not necessarily reflect the results of operations that would have occurred had the acquisitions taken place as described and is not necessarily indicative of results that may be obtained in the future.

	Years Ended December 31, 2001	2000
	(Unaudited)	
Pro forma revenues	$ 41,488,751	$ 32,972,580
Pro forma net loss	$ (1,649,549)	$ (52,101,323)
Pro forma basic net loss per share:		
Basic and diluted	$ (0.06)	$ (6.01)
Pro forma weighted average common shares:		
Basic and diluted	25,784,852	8,664,668

(4) Inventories

Inventories consist of the following:

	December 31, 2001	2000
Finished goods	$ 3,329,336	$ 1,414,951
Work in process	593,833	399,064
Raw materials	2,049,539	1,908,165
	$ 5,972,708	$ 3,722,180

(5) Property, Plant and Equipment

Property, plant and equipment consists of the following:

	December 31, 2001	December 31, 2000
Land and buildings	$ 756,232	$ 588,187
Machinery and equipment	2,688,150	1,051,458
Computer equipment	1,331,204	535,596
Furniture and fixtures	478,015	356,264
Automobiles	177,613	139,399
	5,431,214	2,670,904
Less accumulated depreciation	1,925,472	955,178
	$ 3,505,742	$ 1,715,726

(6) Long-Term Debt

Long-term debt consists of the following:

	December 31, 2001	December 31, 2000
Notes payable	$ 4,333,174	$ —
Capital lease obligations (note 9)	198,067	7,786
	4,531,241	7,786
Less current installments	3,894,088	6,644
	$ 637,153	$ 1,142

On November 1, 2001, at the request of the sellers of Scie-Plas Ltd., the Company entered into a loan agreement with the sellers to defer payment of approximately $3.9 million of the purchase price for the outstanding shares of Scie-Plas Ltd. (see note 3). The loan is secured with cash in an equal amount and accrues interest at the same rate of interest earned by the cash. Approximately $3.5 million of the note is payable on November 1, 2002, and the remaining $.4 million is due April 1, 2003.

On December 5, 2001, in connection with the purchase of the outstanding shares of Asys Hitech, GmbH, the Company assumed liability of $278,000 related to amounts owed to a shareholder of Asys Hitech. Approximately $167,000 of this debt will be paid during 2002, with the remaining $111,000 due and payable on September 6, 2003.

The remaining debt of $200,000, will be paid or reduced upon agreement of the final statement of net assets acquired from Asys Hitech.

(7) Convertible and Redeemable Preferred Stock

During 1999, 48,500 shares of Series B convertible and redeemable preferred stock were issued to partially finance the acquisition of Biochrom (see note 3). The net proceeds from this issuance were $925,174. The Company's Series B convertible redeemable preferred stock had a dividend preference over the Series A preferred stock, and as a result, no dividends were paid in respect of shares of Series A preferred stock unless all accrued dividends that became payable in respect of Series B preferred stock were paid. The Series B redeemable convertible preferred stock was convertible at the option of the holder, at any time, into shares of common stock of the Company at a conversion rate of 19.71 shares of common stock for each share of Series B redeemable convertible preferred stock, subject to adjustment for subdivision of Series B preferred stock or any issuance of additional shares of Series B preferred stock. In December 2000, the convertible preferred stock was converted to 955,935 shares of common stock of the Company simultaneously with the initial public offering of the Company's common stock.

Redeemable preferred Series A stock paid quarterly cumulative dividends in arrears at a rate of approximately $0.26 per share. On March 3, 2000, convertible and redeemable preferred "B" stock started to accrue dividends at a rate of $1.44 that were payable a year in arrears on March 3, 2001, and thereafter quarterly in arrears. In December 2000, the redeemable preferred stock was redeemed in full simultaneously with the initial public offering of the Company's common stock.

(8) Common Stock Warrants

At December 31, 1999, there were outstanding 8,509,905 warrants, which enabled the holders to purchase a like amount of the Company's common stock for $0.0005 per share. The warrants were issued in connection with the issuance of Series A redeemable preferred stock (6,046,510 warrants) and subordinated debentures (2,463,395 warrants) that occurred on March 15, 1996.

Commencing on March 15, 2002, the holders of the warrants may have at any time required the Company to repurchase the warrants, or any common shares previously acquired from exercise of the warrants, for their fair market value as determined in good faith by the Company's board of directors. Such repurchase price would have been repaid in 12 equal quarterly installments beginning on the first business day of the month following the surrender of the warrants or applicable shares of common stock. In 2000 and 1999 interest expense of $36,884,915 and $29,694,019, respectively, was recorded to accrue the estimated amount of this potential liability in accordance with EITF 96-13, *Accounting for Derivative Financial Instruments Indexed to and Potentially Settled in, a Company's Own Stock*.

In December 2000, the holders of the outstanding common stock warrants terminated the requirement of the Company to repurchase the warrants. Accordingly, the outstanding common stock warrants were converted to 8,509,337 shares of the Company's common stock simultaneously with the initial public offering of the Company's common stock and the liability previously recorded was reclassified to stockholders' equity.

(9) Leases

The Company leases automobiles and equipment under various leases that are classified as capital leases. The carrying value of automobiles and equipment under capital leases at December 31, 2001, 2000 and 1999 was $199,822, $7,265 and $14,532, respectively, which is net of $12,834, $30,735 and $68,602, respectively, of accumulated depreciation.

The Company has noncancelable operating leases for office and warehouse space expiring at various dates through 2009. Rent expense for the years ended December 31, 2001, 2000 and 1999 was approximately $744,000, $541,000 and $484,000, respectively.

Future minimum lease payments for both capital and operating leases, with initial or remaining terms in excess of one year at December 31, 2001, are as follows:

	Capital Leases	Operating Leases
2002	$ 91,113	$ 995,285
2003	77,733	988,251
2004	36,381	905,135
2005	18,032	683,328
2006	19,478	556,140
Thereafter	—	1,048,320
Net minimum lease payments	242,737	$ 5,176,459
Less amount representing interest	44,670	
Present value of net minimum lease payments	$ 198,067	

(10) Related Party Transactions

The Company paid an annual consulting fee to a former stockholder who formerly served on its board of directors and, by written agreement, provided no less than five days of consulting services each month. The agreement was scheduled to expire on March 15, 2001 or at the time of any initial public offering of the Company's stock or other sale of a material portion of the Company's stock or assets, if such a transaction occurred before that date. As of September 30, 2000, the agreement with the former stockholder was rescinded. The related consulting expense for the years ended December 31, 2000 and 1999 was $294,583 and $258,437, respectively.

(11) Employee Benefit Plans

The Company sponsors profit sharing retirement plans for its U.S. employees, which includes an employee savings plan established under Section 401(k) of the U.S. Internal Revenue Code. The plan covers substantially all full-time employees who meet certain eligibility requirements. Contributions to the profit sharing retirement plan are at the discretion of management. For the years ended December 31, 2001, 2000, and 1999, the Company contributed approximately $142,000, $81,000 and $67,000, respectively, to the plans.

Certain of the Company's subsidiaries in the United Kingdom (UK), Harvard Apparatus Limited, and Biochrom Limited maintain contributory, defined benefit pension plans for substantially all of their employees.

The components of the Company's pension expense, primarily for Biochrom, for the years ended December 31, 2001 and 2000 follow:

	Years Ended December 31, 2001	2000	1999
Components of net periodic benefit cost:			
Service cost	$ 390,223	$ 319,053	$ 288,640
Interest cost	418,178	347,215	250,437
Expected return on plan assets	(512,564)	(527,397)	(364,684)
Net amortization gain	17,581	(20,769)	6,965
Net periodic benefit cost	$ 313,418	$ 118,102	$ 181,358

The funded status of the Company's defined benefit pension plans and the amount recognized in the balance sheet at December 31, 2001 and 2000 follow:

	Years Ended December 31, 2001	2000
Change in benefit obligation:		
Balance at beginning of year	$ 7,221,941	$ 5,829,403
Service cost	390,223	319,053
Interest cost	418,178	347,215
Participants' contributions	94,357	81,369
Actuarial (gain) loss	(606,776)	1,158,295
Benefits paid	(68,592)	(46,058)
Currency translation adjustment	(176,611)	(467,336)
Balance at end of year	$ 7,272,720	$ 7,221,941
Change in fair value of plan assets:		
Balance at beginning of year	$ 6,744,668	$ 7,062,645
Actual return on plan assets	(421,810)	(51,692)
Participants' contributions	94,357	81,369
Employer contributions	243,428	258,756
Benefits paid	(68,592)	(46,058)
Currency translation adjustment	(149,251)	(560,352)
Balance at end of year	$ 6,442,800	$ 6,744,668

	Years Ended December 31, 2001	2000
Funded status:		
Plan assets less than benefit obligation	$ (829,920)	$ (477,273)
Unrecognized loss	1,211,987	921,611
Prepaid pension expense in consolidated balance sheets	$ 382,067	$ 444,338

The weighted average assumptions used in determining the net pension cost for the Company's plans follows:

	Years Ended December 31, 2001	2000
Weighted average assumptions:		
Discount rate	6.0%	6.0%
Expected return on assets	8.0%	7.0-8.0%
Rate of compensation increase	4.0%	4.5%

(12) Income Taxes

The significant components of the Company's deferred tax assets and liabilities at December 31, 2001 and 2000 are as follows:

	Years Ended December 31, 2001	2000
Deferred tax assets:		
Accounts receivable	$ 1,055	$ 31,755
Inventory	286,868	185,990
Operating loss and credit carryforwards	1,467,814	175,998
Accrued expenses	56,793	82,698
Goodwill	35,782	51,368
Property, plant and equipment	21,897	—
Other accrued liabilities	293,211	—
Total deferred tax assets	2,163,420	527,809
Deferred tax liabilities:		
Catalog costs	—	12,141
Pension fund asset	—	22,010
Property, plant and equipment	39,616	15,927
Intangible assets	3,778,243	—
Other	—	11,741
Total deferred tax liabilities	3,817,859	61,819
Net deferred tax asset (liability)	$ (1,654,439)	$ 465,990

The amount recorded as gross deferred tax assets as of December 31, 2001 and December 31, 2000 represents the amount of tax benefits of existing deductible temporary differences or carryforwards that are more likely than not to be realized through the generation of sufficient future taxable income within the carryforward period. The Company believes that the gross deferred tax asset at December 31, 2001 will more likely than not be realized in the carryforward period. Management reviews the recoverability of deferred tax assets during each reporting period.

At December 31, 2001, the Company had federal and state net operating loss carryforwards available to offset future taxable income of approximately $2,599,000 and $3,470,000, respectively. The federal operating loss carryforwards generated in years 2001 and 2000 expire in years 2021 and 2020, respectively. The state net operating loss carryforwards generated in years 2001 and 2000 expire in year 2006 and 2005, respectively. Furthermore, the Company had foreign operating carryforwards to offset future taxable income of approximately $500,000. These foreign net operating loss carryforwards generated in 2001 begin to expire in 2006. The Company has also generated business credit and minimum tax credit carryforwards of approximately $79,000 and $56,000, respectively, available to reduce future regular income taxes. The tax credit carryforward generated in years 2000 and 2001 begin to expire in year 2019. Utilization of the net operating losses may be subject to an annual limitation imposed by change in ownership provision of Section 382 of the Internal Revenue Code and similar state provisions.

In accordance with SFAS No.109, *Accounting for Income Taxes*, the accounting for the tax benefits of acquired deductible temporary differences which are not recognized at the acquisition date because a valuation allowance may be established, and recognized subsequent to the acquisitions will be applied first to reduce to zero, any goodwill and other non current intangible assets related to the acquisitions. Any remaining benefits would be recognized as reduction of income tax expense. As of December 31, 2001, approximately $1,908,000 of the Company's deferred tax asset pertains to acquired companies. If the Company concludes in a subsequent period, that a valuation allowance is required for previously recognized tax benefits from acquisition, the establishment or reestablishment of that valuation allowance would be recognized as income tax expense attributable to income from continuing operations, not as an increase in goodwill related to the acquisition. The Company's deferred tax liability relates significantly to the financial statement and tax carrying basis amount of certain acquired identifiable intangible assets.

Income tax expense is based on the following pre-tax income (loss) for the years ended December 31, 2001, 2000 and 1999:

	Years Ended December 31,		
	2001	**2000**	**1999**
Domestic	$ (7,408,456)	$ (51,098,496)	$ (32,040,219)
Foreign	3,989,991	2,588,112	2,757,782
	$ (3,418,465)	$ (48,510,384)	$ (29,282,437)

Income tax expense (benefit) attributable to income (loss) from continuing operations for the years ended December 31, 2001, 2000 and 1999 consisted of:

	Years Ended December 31,		
	2001	**2000**	**1999**
Current income tax expense (benefit):			
Federal and state	$ (158,835)	$ (560,364)	$ 403,149
Foreign	1,755,161	992,100	1,043,539
	1,596,326	431,736	1,446,688
Deferred income tax (benefit) expense:			
Federal and state	396,038	903,168	(1,238,399)
Foreign	(202,410)	24,497	(70,809)
	193,628	927,665	(1,309,208)
Total income tax expense	$ 1,789,953	$ 1,359,401	$ 137,480

The income tax benefits derived from certain stock-based compensation, amounting to $121,275, $0 and $0 for the years ended December 31,2001, 2000 and 1999, respectively, were allocated to stockholders' equity.

Income tax expense for the years ended December 31, 2001, 2000 and 1999 differed from the amount computed by applying the U.S. federal income tax rate of 34% to pretax income (loss) as a result of the following:

	Years Ended December 31, 2001	2000	1999
Computed "expected" income tax benefit	$ (1,162,278)	$ (16,493,531)	$ (9,956,029)
Increase (decrease) in income taxes resulting from:			
Foreign tax rate and regulation differential	195,561	112,097	35,804
State income taxes, net of federal income tax benefit	(73,725)	63,600	(154,569)
Interest expense (common stock warrants)	—	12,539,403	10,254,946
Foreign Sales Corporation tax benefits	(30,195)	(32,596)	(28,761)
Other	54,889	(26,721)	(13,911)
Nondeductible acquisition goodwill, trademark and workforce	127,234	—	—
Nondeductible in-process research and development	1,851,980	—	—
Stock compensation expense in excess of allowable tax benefits on exercise of options	826,487	5,197,149	—
Total income tax expense	$ 1,789,953	$ 1,359,401	$ 137,480

Undistributed earnings of the Company's foreign subsidiaries amounted to approximately $7,736,580, $5,297,594 and $2,992,805 at December 31, 2001, 2000 and 1999, respectively. The Company's policy is that these earnings are indefinitely reinvested and, accordingly, no related provision for U.S federal and state income taxes has been provided. Upon distribution of those earnings in the form of dividends or otherwise, the Company will be subject to both U.S. income taxes (less foreign tax credits) and withholding taxes in the various foreign countries.

(13) Stock Compensation Plans

In 2000, the Company approved a stock purchase plan allowing employees to purchase the Company's common stock at 85% of the lesser of beginning or ending fair market value at six month intervals. Under this plan, 500,000 shares of common stock are authorized for issuance of which 11,884 shares were issued as of December 31, 2001.

In 1996, the Company adopted the 1996 Stock Option and Grant Plan (the "1996 Plan") and in 2000, the Company adopted the 2000 Stock Option and Incentive Plan (the "2000 Plan" and, together with the 1996 Plan the "Plans") pursuant to which the Company's Board of Directors can grant stock options to employees, directors and consultants. The Plans authorize grants of options to purchase up to 4,589,081 shares of authorized but unissued stock.

As of December 31, 2001, 2000 and 1999, 1,790,176, 1,582,910 and 1,119,725 "Incentive Stock Options," and 2,827,367, 2,519,576 and 1,812,295 "Non-qualified Stock Options," respectively, had been granted to employees. The Incentive Stock Options become fully vested over a four year period, on a pro rata basis. The Non-qualified Stock Options granted prior to 1999 became vested during 2000 as the fair market value of the Company's common stock was determined to be, on a fully diluted basis, not less than $1.42 per common share. For non-qualified options granted under the 1996 Plan during 1999, prior to an amendment to the 1996 Plan dated September 29, 2000, the options were deemed to be vested and exercisable upon either (i) the sale of all or substantially all of the assets or capital stock of the Company for an actual or implied price per share of not less than $2.09 or (ii) an initial public offering of the Company's stock with a price per share of not less than $2.09 and gross proceeds to the Company of at least $15 million. On September 29, 2000, the vesting schedule was amended so that the options were vested and exercisable upon either (i) a sale of all or substantially all of the assets or capital stock of the Company for an actual or implied net price per share of Common Stock of not less than $2.09 or (ii) if the fair market value of the Company at any time prior to December 31, 2000 resulted in a per share valuation, on a fully diluted basis, of not less than $2.09 per share. As a result of the 1996 Plan amendment, the related options vested immediately as a per share valuation of $2.09 was attained.

The Company applies APB Opinion No. 25 in accounting for the Plans. APB No. 25 requires no recognition of compensation expense for stock option awards when on the date of grant the exercise price is equal to the estimated fair market value of the Company's common stock and the number of options granted is fixed. During the year ended December 31, 2001, 52,621 stock options were granted to employees at an exercise price of $1.87 for 42,766 of the options and $1.05 for 9,855 of the options, which was estimated to be less than the fair market value of the Company's common stock on the date of grant. During the year ended December 31, 2000, 1,140,466 stock options were granted to employees at an exercise price of $1.05, which was estimated to be less than the fair market value of the Company's common stock on the date of grant. Accordingly, for the years ended December 31, 2001 and 2000, compensation expense of $2,678,743 and $4,635,949, respectively, was recognized on these stock option grants. As of December 31, 2001 additional compensation expense of approximately $2.0 million will be recognized in future periods over the four year vesting period of the options. The Company's 1996 and 1999 Non-qualified Stock Option awards were considered variable awards as the number of shares to be acquired by the employees was indeterminable at the date of grant. Accordingly, for the year ended December 31, 1999 the Company recognized compensation expense of $3,283,164 on the non-qualified Stock Options granted in 1996. At December 31, 1999, all non-qualified stock options granted in 1996 were fully vested because a per share valuation of $1.42 was attained. For the year ended December 31, 2000, the Company recognized compensation expense of $10,039,350 on the non-qualified options granted in 1999.

On September 29, 2000, two officers exercised 563,942 non-vested options that were granted during 2000 for 563,942 shares of restricted common shares for cash consideration of $286 and two promissory notes amounting to $589,652 payable to the Company. The notes have a three-year maturity and a fixed interest rate of 10% per annum, compounded annually. The restricted stock becomes fully vested over a four-year period, on a pro rata basis. The estimated fair market value of the shares awarded on the original option date grant and on the date of exercise was estimated to be $6,767,310 of which $1,673,025 and $3,217,154 has been recognized as stock compensation expense for the years ended December 31, 2001 and 2000, respectively. The remaining unearned compensation of approximately $1.3 million is being amortized to expense over the four year vesting period. Also on September 29, 2000, two officers of the Company exercised 916,514 fully vested options for cash of $465 and two promissory notes amounting to $958,298 payable to the Company. The notes have a three-year maturity and a fixed interest rate of 10% per annum, compounded annually.

The following is a summary of stock option activity.

	Employee Stock Options	
	Options Outstanding	**Weighted Exercise Price**
Balance at December 31, 1998	2,015,505	$ 0.02
Options granted	916,515	1.05
Balance at December 31, 1999	2,932,020	0.33
Options exercised	(3,467,955)	0.45
Options forfeited	(5,421)	1.05
Options granted	1,170,466	1.23
Balance at December 31, 2000	629,110	1.33
Options exercised	(288,075)	0.40
Options forfeited	(150,027)	3.20
Options granted	515,057	4.14
Balance at December 31, 2001	706,065	$ 3.37

During 2001, 2000 and 1999, there were no other additional options exercised, canceled, expired or forfeited, or changes in any option terms, including exercise prices. The weighted average fair value of options granted during 2001, 2000 and 1999 was $8.74, $9.70, and $1.05, respectively.

The following is a summary of information relating to stock options outstanding at December 31, 2001:

	Options Outstanding			Options Exercisable	
Range of Exercise price	Number outstanding at December 31, 2001	Weighted-average remaining contractual life	Weighted-average exercise price	Shares exercisable at December 31, 2001	Weighted-average exercise price
$ 0.01	59,721	6.1 years	$ 0.01	59.721	$ 0.01
$ 1.05-1.87	414,346	8.3 years	$ 1.10	109,751	$ 1.19
$ 7.12-8.00	182,000	9.5 years	$ 7.79	9,999	$ 8.00
$ 9.05-10.60	50,000	9.7 years	$ 10.04	0	$ 0.00
$ 0.01-10.60	706,067	8.5 years	$ 3.37	179,471	$ 1.18

Had the Company determined compensation cost based on the fair value of the options at the grant date, as is permitted by SFAS No. 123, the Company's net income would have been as follows:

	Years Ended December 31, 2001	2000	1999
Net loss available to common shareholders	$ (5,208,418)	$ (50,005,936)	$ (29,576,503)
Pro forma net loss available to common shareholders	$ (5,710,339)	$ (50,157,740)	$ (29,576,619)
Basic net loss per share	$ (0.20)	$ (6.25)	$ (5.28)
Pro forma basic net loss per share	$ (0.22)	$ (6.27)	$ (5.28)
Diluted net loss per share	$ (0.20)	$ (6.25)	$ (5.28)
Diluted pro forma net loss per share	$ (0.22)	$ (6.27)	$ (5.28)

The fair value of each option grant for the Company's Plans is estimated on the date of the grant using the Black-Scholes pricing model, with the following weighted average assumptions used for grants in 2001, 2000 and 1999.

	Years Ended December 31, 2001	2000	1999
Risk free interest rates	5.4%	5.9%	5.6%
Expected option lives	2 years	2 years	7 years
Expected dividend yields	0%	0%	0%
Expected volatility	89.12%	80.90%	0%

(14) Segment and Related Information

The Company operates in one significant business segment.

Revenues by geographic area consists of the following:

	Years Ended December 31, 2001	2000	1999
United States	$ 16,504,892	$ 9,379,986	$ 8,169,470
United Kingdom	19,098,428	15,828,225	15,353,761
Canada and Europe	5,265,067	5,366,589	2,654,583
	$ 40,868,387	$ 30,574,800	$ 26,177,814

Long lived assets by geographic area consists of the following:

	Years Ended December 31, 2001	2000	1999
United States	$ 23,297,647	$ 5,337,151	$ 1,955,630
United Kingdom	11,167,486	5,712,663	6,036,137
Canada and Europe	2,235,117	228,297	151,509
	$ 36,700,250	$ 11,278,111	$ 8,143,276

(15) Income (Loss) Per Share

Basic income (loss) per share is based upon net income (loss) less dividends on preferred stock divided by the weighted average common shares outstanding during each year. The calculation of diluted net income (loss) per share assumes conversion of convertible preferred stock, stock options and common stock warrants into common stock, and also adjusts net income (loss) for the effect of converting convertible preferred stock and common stock warrants into common stock. Net income (loss) and shares used to compute net income per share, basic and diluted, are reconciled below:

	Years Ended December 31, 2001	2000	1999
Net income (loss) available to common shareholders	$ (5,208,418)	$ (50,005,936)	$ (29,576,503)
Effect of dilutive securities:			
Common stock warrants	—	—	—
Net income (loss), assuming dilution	$ (5,208,418)	$ (50,005,936)	$ (29,576,503)
Weighted average common shares outstanding during the year	25,784,852	8,005,386	5,598,626
Effect of dilutive securities:			
Common stock warrants	—	—	—
Common stock options	—	—	—
	25,784,852	8,005,386	5,598,626

For the years ended December 31, 2001, 2000 and 1999, common equivalent shares of 597,517, 7,456,010 and 11,378,110 respectively, resulting from stock options, warrants and restricted stock were not included in the computation of diluted earnings per share because to do so would have been antidilutive.

(16) Accrued Expenses

Accrued expenses consist of:

	Years Ended December 31, 2001	2000
Accrued compensation and payroll	$ 1,643,321	$ 1,188,553
Accrued legal and professional fees	367,198	1,843,644
Warranty costs	279,331	20,928
Other	622,351	252,435
	$ 2,912,201	$ 3,305,560

(17) Contingencies

The Company is subject to legal proceedings and claims arising out of its normal course of business. Management, after review and consultation with counsel, considers that amounts accrued for in connection therewith are adequate.

(18) Concentrations of Credit Risk

One commercial customer accounted for 30%, 39% and 44% of revenues for the year ended December 31, 2001, 2000 and 1999, respectively. At December 31, 2001 and 2000, one customer accounted for 26% and 35% of accounts receivable, respectively. Except as noted above, no other individual customer accounted for more than 10% of revenues for the years ended December 31, 2001, 2000 and 1999. In addition, except as noted above, no other individual customer accounted for more than 10% of accounts receivable at December 31, 2001 and 2000.

(19) Initial Public Offering

On December 7, 2000, the Company sold, pursuant to an underwritten initial public offering, 6,250,000 shares of common stock at a price of $8 per share. Following the offering, proceeds were used to repay substantially all of the Company's short term and long term debt as well as redeem its redeemable preferred stock (see notes 7 and 8). On January 4, 2001, the underwriters exercised their allotment option whereby the Company sold an additional 937,500 shares of its common stock at a price of $8 per share. The net proceeds to the Company as a result of these offerings was approximately $51.8 million.

(20) Asserted Legal Claim

On December 26, 2000, Harvard University filed a lawsuit in U.S. District Court, District of Massachusetts alleging that our use of the "Harvard Bioscience" and "Harvard Apparatus" names infringes on Harvard University's trademarks. Harvard University is seeking both injunctive relief and monetary damages. The Company believes that these claims are without merit, and are vigorously defending against such claims. On April 10, 2001, the U.S. District Court, District of Massachusetts denied Harvard University's request for a preliminary injunction prohibiting the Company from using the name "Harvard Bioscience" and "Harvard Apparatus". The Court did issue an order directing the Company not to use the "Harvard" name in the color crimson or in a font similar to the font used by Harvard University.

On February 4, 2002, Paul D. Grindle, the former owner of Harvard Apparatus, Inc., initiated an arbitration proceeding against the Company and certain directors before JAMS, an arbitration firm in Boston, Massachusetts. Mr Grindle's claims arise out of post-closing purchase price adjustments related to the Company's purchase of the assets and business of Harvard Apparatus by virtue of an Asset Purchase Agreement dated March 15, 1996 and certain related agreements. In the arbitration demand, Mr. Grindle sought the return of 1,563,851 shares of stock in the Company, or the disgorgement of the profits of the Company's sale of the stock, as well as punitive damages and attorney's fees under Mass. Gen. Laws, chapter 93A. In a demand letter that was attached to the Arbitration Demand, Mr. Grindle asserted losses in the amount of $15 million, representing the value of the 1,563,851 shares of the Company's stock as of January 2, 2002. The Company believes that Mr. Grindle's claims are without merit and intends to defend them vigorously. The Company also believes that Mr. Grindle's claims are barred by the terms of certain releases executed by him and further barred by the applicable statutes of limitation.

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Forward-Looking Statements

This Annual Report contains statements that are not statements of historical fact and are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Forward-looking statements include, but are not limited to, statements about our future growth rate, our business model, business strategy, the market opportunity for our products, our estimates regarding our capital requirements, the timing of future product introductions, our expectations in connection with current litigation, and our plans, objectives, expectations and intentions that are not historical facts. In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "could, " "would," "expects," "plans," "anticipates," "believes," "estimates," "projects," "predicts," "intends," "potential" and similar expressions intended to identify forward-looking statements. These statements reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties. Given these uncertainties, you should not place undue reliance on these forward-looking statements. We discuss many of these risks in detail under the heading "Important Factors That May Affect Future Operating Results" beginning on page 19 in the section "Management's Discussion and Analysis of Financial Condition and Results of Operations". You should carefully review all of these factors, and you should be aware that there may be other factors, including factors of which we are not currently aware, that could cause these differences. Also, these forward-looking statements represent our estimates and assumptions only as of the date of this report. We may not update these forward-looking statements, even though our situation may change in the future, unless we have obligations under the Federal securities laws to update and disclose material developments related to previously disclosed information.

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