Enzo Biochem, Inc. *Annual Report 2003*

Enzo Biochem, Inc. *is a leading biotechnology company engaged in the research, development, marketing and manufacture of innovative health care products. In business since 1976, Enzo's products and services are sold to and used by scientists and the medical community worldwide. The Company has proprietary technologies and expertise in manipulating and modifying genetic material and other biological molecules. Through three wholly-owned subsidiaries, the Company targets its technology toward satisfying specific market needs.* ***Enzo Therapeutics, Inc.*** *is leading the development of medicines based on genetic and immune regulation to combat cancer, viral and other diseases.* ***Enzo Life Sciences, Inc.*** *develops and markets proprietary DNA probe-based products to clinicians and researchers.* ***Enzo Clinical Labs, Inc.*** *provides diagnostic testing services to the New York medical community.*

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To Our Shareholders:

Fiscal 2003 was a significant and eventful year for Enzo Biochem, Inc.

Our pioneering research at Enzo Therapeutics in the development of immune and gene regulation medicines has led to a number of clinical programs currently underway. In addition, our successful preclinical research studies have added new innovative platforms to our capabilities, enhancing our therapeutic pipeline.

At Enzo Life Sciences, we have expanded our new product development programs for the genomic analysis and expression markets. We have also expanded our customer reach and enhanced our ability to position our products in the marketplace through the implementation of a targeted direct marketing program.

Enzo Clinical Labs completed a successful turnaround and returned to profitability. This past year we implemented a multi-pronged program designed to strengthen our operations, collection processes, and billing procedures. We also benefited from the refocusing of our business into our core, more profitable segments.

The healthcare field is undergoing rapid change, and incorporating new techniques and technical advances arising from progress made in the areas of genomics and gene analysis. As industry leaders, Enzo is poised to take full advantage of the promising opportunities in diagnostics and therapeutics, and in the way medicine is practiced. Highlights of our progress in these areas follow.

Enzo Therapeutics

Enzo's innovative therapeutic technologies are concentrated primarily on developing medicines for managing infectious and immune mediated diseases. These are among the highest contributors to the cost of healthcare worldwide, and, generally, long-term effective treatments for many of these disorders are limited. The novel technologies we have developed, and continue to develop, will serve as enabling platforms for medicines designed to specifically target and inhibit infectious disease pathogens and to regulate the individual's immune response.

The first thrust of our two-fold approach is the development of gene medicines and is based on our gene regulation technology. Most diseases are the consequence of the expression of foreign genes, such as those found in viruses, or the abnormal or unregulated expression of the body's own genes. The failure to express a gene frequently is a cause of disease. Enzo's gene regulation technology is designed to insert a gene that will operate biologically on an ongoing basis to disable a pathological mechanism within the cell.

The gene is delivered to the cell using Enzo's *StealthVector® HGTV43™* gene construct, a proprietary delivery system developed by our scientists to overcome a major challenge in gene medicine – the efficient and safe delivery of the medicine to the appropriate target. The benefits of Enzo's vector technology are that it achieves efficient delivery of the gene into the patient's cells, and that it is "silent" and unlikely to trigger an immune response.

The second approach is our proprietary immune regulation technology, designed to control an individual's immune response to an antigen that the human body perceives as foreign. Such responses are seen in infectious diseases, immune-mediated diseases and complications arising from transplantation. Enzo is using its technology to develop potential treatments for a growing roster of these conditions.

Specifically, our Company now has a number of important projects underway:

- **Inflammatory bowel disease.** Currently in progress is a Phase II randomized double blind clinical trial of our Company's innovative immune regulation medicine for treatment of Crohn's Disease. This product is in the form of a "personalized medicine" in which the treatment is designed individually to conform to the biological makeup of each patient and has been evaluated successfully in both preclinical and clinical studies. In preclinical studies, in which laboratory animals with experimentally induced colitis were treated using this approach, the animals responded to the experimental treatment and their symptoms were ameliorated. In an open label Phase I clinical trial, ten human subjects were treated and all showed a

clinical response during the course of the trial. We look forward to further studies, which, if successful, could give rise to an important new approach for treating this condition.

- **Human Immunodeficiency Virus (HIV-1).** HIV infection, which is believed to result in the progressive decrease in the number of CD4+ T-cells in the infected individual, can lead to AIDS and ultimately death. HIV infection is a growing worldwide problem, with an increase in the number of reported cases. Enzo's *StealthVector® HGTV43™* gene construct, a proprietary delivery system carrying anti-HIV-1 antisense RNA genes directed at HIV viral replication is being investigated as a potential treatment. Results of our Phase I clinical trial showed that all subjects tolerated the treatment and that the engineered CD4+-T cells containing anti-HIV-1 antisense RNA continue to be expressed in circulation, with the longest running subject at 48 months to date. A Phase I/II clinical trial designed to increase the percentage of engineered CD4+ T-cells has been approved at the New York Presbyterian Hospital-Weill Medical College of Cornell University, in New York City. Approval by Cornell's Institutional Biosafety Committee (IBC) was the last in a series of regulatory actions before initiation of the Phase II trial that included the U.S Food and Drug Administration (FDA), the Recombinant DNA Advisory Committee (RAC) of the National Institutes of Health and Cornell's Institutional Review Board (IRB), after a comprehensive review of the clinical protocol and safety features of the vector.

- **Hepatitis B (HBV).** HBV is a viral pathogen that can lead to a condition in which the body destroys its own liver cells through an immune response. Commonly referred to as chronic active hepatitis, it is estimated that approximately 2 billion people are infected by HBV, with an estimated 350 million chronically infected and therefore at risk of death from liver disease. A randomized double blind Phase II study to test Enzo's proprietary immune regulation medicine, EHT899, to treat this disease is currently being formulated. Results from an open label Phase II clinical trial indicate that EHT899 may induce a secondary immune response against the virus, at the same time reducing the undesirable response associated with HBV infection. Subjects in this clinical trial at the Liver Unit of Hadassah-Hebrew University Medical Center, in Jerusalem, Israel, to whom EHT899 was administered orally, tolerated the drug well, with 46% showing decreased HBV viral load, and 33% experiencing decreased inflammation on liver biopsies.

- **Hepatitis C (HCV).** EHC18 is being studied as a potential treatment for HCV, a disease affecting approximately 3.9 million people in the U.S., over two-thirds of whom are chronically infected. About 85% of people infected with HCV develop chronic hepatitis, and roughly one-fifth develop cirrhosis. We have completed a successful Phase I trial demonstrating the safety aspects of the product and are currently developing protocols for further evaluation.

- **Graft versus Host Disease (GvHD).** A major complication in transplantation, GvHD, which manifests as a multi-organ disorder, is a major complication in bone marrow and stem cell transplantation and accounts for much of the medical complications associated with these transplants. GvHD is an immune response mounted by the engrafted tissue or cell population against the recipient, resulting in a wasting syndrome and occasionally death. Only approximately 15,000 bone marrow transplants are performed annually due in part to GvHD, a number that would be expected to increase substantially with its elimination. Current treatment involves immunosuppressant drugs. Results from preclinical studies of Enzo's immune regulation technology for management of the immune response demonstrate that this technology has the potential to be effective in negating the effects of GvHD by controlling the immune response mounted by the donor tissue or cells. The Company is currently evaluating protocols for further investigation.

In addition to these novel proprietary treatments, Enzo and its collaborators reported recently on two new therapeutic platforms that the Company is developing for the treatment of immune mediated disorders. The new platforms are currently in preclinical investigation, with work progressing towards clinical evaluation. These innovative platforms would complement Enzo's current therapeutic approaches. The two new platforms are, first, the identification of a new specific small molecule that promotes and directs certain specific immune responses, and, second, a cell therapy platform based on the use of regulatory immune cells.

We believe that the new platforms, together with the Company's current oral immune regulation platform, could enable the Company to develop and launch products for treatment of a broad range of immune mediated

diseases, including hepatitis B virus and hepatitis C virus (HCV) associated liver disease, various cancers, Crohn's disease and other forms of inflammatory bowel diseases, diabetes and graft versus host disease.

These far-reaching and inventive proprietary approaches underscore Enzo's singular ability to research and develop innovative medical technologies. Our considerable strength in therapeutics derives from our determination to foster practical, viable solutions, and to apply our considerable expertise creatively. Professionally, our Company is gaining increasing recognition for unique therapeutic approaches. Enzo Therapeutics is positioned strongly to become a leader in this new age of medicine.

Enzo Life Sciences

This past year Enzo Life Sciences added to its broad technological base for the labeling, detection, amplification and formatting of nucleic acids for gene analysis. We have significantly enhanced our proprietary position in each of these fields. The ultimate goal of our life sciences programs is to introduce multiple products and technologies to support the growing number of programs in the field of genomics and biomedical research. This past year we have invested in a number of new research and development activities which today are emerging in new products and technologies.

A key product area under development has been to develop a simple user-friendly method of gene amplification. Gene amplification provides researchers with the ability to increase or amplify the number of copies of a particular gene sequence. This technology is at the foundation of the development of diagnostics, especially in the field of infectious diseases. The amplification methods currently in use in the marketplace require periods of heating and cooling, or thermocyling, which often leads to degradation of the final products, and requires the use of relatively expensive enzymes.

Enzo's approach provides a less cumbersome, more cost effective solution to gene amplification. The Company's *Inchworm*™ isothermal amplification procedure is performed at a single temperature, eliminating the need for expensive thermocyling equipment and utilizes a commonly available and relatively inexpensive enzyme to catalyze these reactions. This product is now in beta testing at our Life Sciences laboratory and holds promise of being expanded into a multi-line product system. *Inchworm*™ isothermal amplification can potentially become the main component of a broad line of products that allows rapid and accurate identification of pathogenic organisms. Enzo recently received a Notice of Allowance by the United States Patent and Trademark Office for a key aspect of this technology.

In addition, Enzo this past year took important steps to expand our life sciences sales and marketing effort. While we still utilize a distribution network, the Company has initiated a program that is a strategic shift towards direct sales, allowing us to more closely interact with our customers. Together with a growing product line – including a line specifically targeted towards the glass slide array market rather than the biochip market – we are moving towards offering a completely integrated system for nucleic acid amplification and detection.

Enzo Clinical Labs

Enzo Clinical Labs posted an excellent year in fiscal 2003. It produced a $3.0 million operating profit, an improvement of nearly $6.8 million over the prior year. This success is the result of a focused program that we implemented a year ago to more intensively direct our efforts towards our core business. Enzo Clinical Labs has materially expanded our in-house test offerings, particularly of higher margin esoteric tests, including reproductive genetics and molecular diagnostics. We also have instituted targeted marketing programs aimed at private practice physicians as we continued to expand our sales and marketing group.

Cost control methods aimed at improving efficiency, heightening productivity and tightening collection procedures also have contributed to this improvement.
Expenses have been sharply reduced without any reduction in operating standards. Additionally, we saw a reduction in the provision for uncollectible accounts at Enzo Clinical Labs of $5.5 million during 2003.

Enzo Clinical Labs' success was not just financial. We were awarded a prestigious "Accreditation with Distinction" from the College of American Pathologists, (CAP), an accrediting society whose standards are more

stringent than those of governmental licensing authorities. The program is designed specifically to ensure the highest standard of care for the laboratory's patients, and the CAP congratulated Enzo on the "excellence of the services being provided".

Financial Results

The Company ended the year with revenues of $52.8 million, gross profit of $41.0 million, and net income of $3.8 million, or $0.13 per share, fully diluted. These were below the results of the prior year, and accountable chiefly due to the loss, late in the year, of an order stream from one large distributor. We have notified this distributor that its contract was terminated and legal action has been instituted to enjoin that company from violations involving Enzo's proprietary technology contrary to the terms of our joint distribution agreement, as well as the recovery of substantial damages.

Our commitment to the future was underscored by increasing our research and development expenditures by $2.1 million, to $8.3 million. Despite this increase in R&D spending, and other expense items, including legal expenditures, cash flows from operating activities remained strong, increasing for the year by 27%, to $12.1 million. The Company's working capital at year-end amounted to $97.7 million, with cash and marketable securities totaling $78.4 million and shareholders' equity at a new record of $109.4 million. In addition, we remain debt free. During the year, the Company declared a 5% stock dividend, an expression by the Board of Directors of their confidence in Enzo's future growth.

Overview

This year has been pivotal for Enzo, as we continue to add to the Company's achievements in Life Sciences and Therapeutics. Our Company has evolved into one of the strongest and, we believe, most promising enterprises in the biotechnology industry, and we have done so by essentially studying, researching and understanding the implications of significant and innovative technologies. Our growing intellectual property and our advancing proprietary technology provide a foundation for Enzo to realize its many opportunities.

The support of our shareholders, employees and Directors has been important in our Company's success to date, and we are very appreciative of their loyalty and efforts.

Barry W. Weiner
President

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

The following discussion of our financial condition and results of operations should be read in conjunction with our financial statements and related notes. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements. See "Cautionary Statement for Purposes of the "Safe Harbor" Provisions of the Private Securities Litigation Reform Act of 1995". Because of the foregoing factors, you should not rely on past financial results as an indication of future performance. We believe that period-to-period comparisons of our financial results to date are not necessarily meaningful and expect that our results of operations might fluctuate from period to period in the future.

Liquidity and Capital Resources

At July 31, 2003, our cash and cash equivalents and marketable securities totaled $78.4 million, an increase of $11.3 million from July 31, 2002. We had working capital of $97.7 million at July 31, 2003 compared to $92.8 million at July 31, 2002.

Net cash provided by operating activities for the year ended July 31, 2003 was approximately $12.1 million as compared to net cash provided by operating activities of $9.6 million for the year ended July 31, 2002. The increase in net cash provided by operating activities from fiscal 2002 to fiscal 2003 was primarily due to lower net income in the current year offset by the net change in operating assets and liabilities compared to the prior year.

Net cash used in investing activities increased approximately $15.5 million from fiscal 2002, primarily as a result of an investment in marketable securities and an increase in capital expenditures.

Net cash provided by financing activities increased by $.6 million from fiscal 2002 primarily as a result of the increase in proceeds from the exercise of stock options.

Net accounts receivable of $17.3 million and $20.3 million represented 119 days and 137 days of operating revenues at July 31, 2003 and 2002, respectively. The change in net accounts receivable is due to an increase in accounts receivable at the clinical reference laboratory of approximately $.6 million and a decrease of research products accounts receivable of approximately $3.6 million. This decrease is primarily due to the decrease in revenue from one specific customer of research products.

The Company has entered into various real estate operating leases with both related and unrelated parties. See Note 6 to the Consolidated Financial Statements for a further description of these various leases.

The Company has an exclusive licensing agreement to an invention covered by licensed patents. Under this agreement, the Company is required to make certain minimum royalty payments of $200,000 per year through the life of the patents. See Note 10 to the Consolidated Financial Statement.

The total future payments under the Company's contractual obligations as of July 31, 2003 are as follows:

	Payments Due by Period			
	Total	Less than 1 year	1-3 years	4-5 years
Operating Leases	$3,148,000	$1,837,000	$1,005,000	$306,000
Total Contractual Cash Obligations	$3,148,000	$1,837,000	$1,005,000	$306,000

We believe that our current cash position is sufficient for our foreseeable liquidity and capital resource needs, although there can be no assurance that future events will not alter such view.

Management is not aware of any material claims, disputes or settled matters concerning third-party reimbursements that would have a material effect on our financial statements.

Critical Accounting Policies

General

The Company's discussion and analysis of its financial condition and results of operations are based upon Enzo Biochem, Inc. consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in

the United States. The preparation of these financial statements requires the Company to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses; these estimates and judgments also affect related disclosure of contingent assets and liabilities. On an on-going basis, we evaluate our estimates, including those related to contractual allowance, allowance for uncollectible accounts, intangible assets and income taxes. The Company bases its estimates on experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

Revenue Recognition

Revenues from the clinical laboratory are recognized as services are rendered upon completion of the testing process for a specific patient. The Company's revenue is based on amounts billed or billable for services rendered, net of contractual adjustments and other arrangements made with third-party payors to provide services at less than established billing rates. Revenues from research product sales, exclusive of certain non-exclusive distribution agreements, are recognized when the products are shipped.

The Company has certain non-exclusive distribution agreements, which provide for consideration to be paid to the distributors for the manufacture of certain products. The Company records such consideration provided to distributors under these non-exclusive distribution agreements as a reduction to research product revenues. The revenue from these non-exclusive distribution agreements are recognized when shipments are made to their respective customers and reported to the Company.

Contractual Allowances

The percentage of the Company's revenues derived from Medicare, third party payers, commercial insurers and managed care patients continue to increase. The Medicare regulations and various managed care contracts are often complex and may include multiple reimbursement mechanisms for different types of services provided in our clinical laboratory. We estimate the allowance for contractual allowances on a payer-specific basis given our interpretation of the applicable regulations and historical calculations. However, the services authorized and provided and related reimbursement are often subject to interpretation that could result in payments that differ from our estimates. Additionally, updated regulations occur frequently necessitating continual review and assessment of the estimation process by management.

Allowance for Doubtful Accounts

The Company's ability to collect outstanding receivables from third party payers is critical to its operating performance and cash flows. The primary collection risk lies with uninsured patients or patients for whom primary insurance has paid but a patient portion remains outstanding. The Company estimates the allowance for doubtful accounts primarily based upon the age of the accounts since invoice date. The Company continually monitors its accounts receivable balances and utilizes cash collections data to support the basis for its estimates of the provision for doubtful accounts. Significant changes in payer mix or regulations could have a significant impact on the Company's results of operations and cash flows. In addition, the Company has implemented a process to estimate and review the collectibles of its receivables based on the period they have been outstanding. Historical collection and payor reimbursement experience is an integral part of the estimation process related to reserves for doubtful accounts. The Company also assesses the current state of its billing functions in order to identify any known collection or reimbursement issues in order to assess the impact, if any, on the reserve estimates, which involves judgment. The Company believes that the collectibility of its receivables is directly linked to the quality of its billing processes, most notably, those related to obtaining the correct information in order to bill effectively for the services provided. Revisions in reserve for doubtful accounts estimates are recorded as an adjustment to bad debt expense. The Company believes that its collection and reserves processes, along with the close monitoring of its billing processes, helps reduce the risk associated with material revisions to reserve estimates resulting from adverse changes in collection and reimbursement experience and billing operations.

Income Taxes

The Company accounts for income taxes under the liability method of accounting for income taxes. Under the 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. The liability method requires that any tax benefits recognized for net operating loss carry forwards and other items be reduced by a valuation allowance where it is more likely than not the benefits may not be realized. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. Under the liability method, 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.

Impairment of Long-Lived Assets

The Company evaluates the requirement to recognize impairment losses on long-lived assets used in operations when indicators of impairment are present and the undiscounted cash flows estimated to be generated by those assets are less than the assets' carrying amount. Company management believes that no impairment to its long-lived assets has occurred.

Results of Operations

Fiscal 2003 Compared to Fiscal 2002

Revenues from operations for the fiscal year ended July 31, 2003 were $52.8 million a decrease of $1.2 million over revenues from operations for the fiscal year ended July 31, 2002. This decrease was due to a decrease of $2.7 million in revenues from our research product sales operations offset by an increase of $1.5 million in revenues from clinical reference laboratory operation over revenues for such activities in fiscal 2003.

The decrease in research product sales resulted primarily from a decrease in direct sales of research products of labeling and detection reagents for the genomics and sequencing markets related to shipments to one major distributor. Research product revenue from this one major distributor accounted for approximately 50% and 49% of the Company's total research product revenues in fiscal 2003 and 2002, respectively.

The increase of clinical laboratory services revenue was due primarily to increase volume of higher priced esoteric tests. Clinical laboratory services are provided to patients covered by various third party payor programs, including Medicare and health maintenance organizations ("HMO's"). Billings for services are included in revenue net of allowances for contractual discounts and allowances paid for differences between the amounts billed and the estimated amount to be paid. Recent trends had indicated a decrease in the collection rates from the Medicare Program, certain third party payors and HMO's. The effect of such reduced collection rates have been reflected in fiscal 2003. The clinical laboratory is subject to seasonal fluctuations in operating results. Volume of testing generally declines during the summer months, the year-end holiday periods and other major holidays. In addition, volume declines due to inclement weather may reduce net revenues. Therefore, comparison of the results of successive quarters may not accurately reflect trends or results for the full year.

Although, research product revenue decreased for the fiscal year, the cost of research products sold increased by $1.5 million to $2.2 million from the prior fiscal year. This increase was primarily due to the increase in reagent costs, the expansion of the manufacturing, processing capabilities and an increase in headcount in these areas, due to the unusually high volume of the orders shipped in the first quarter of fiscal 2003 to one major distributor that did not continue for the balance of fiscal 2003.

The cost of clinical laboratory services decreased by $.5 million during this period primarily due to a reduction in personnel costs and the improved efficiency of performing certain esoteric tests in-house that reduced certain other expenses.

Research and development expenses increased by approximately $2.1 million as a result of an increase in the expenses related to the clinical trial activities and other research projects.

Selling expenses increased by $.4 million during this fiscal year, as compared to the prior year's fiscal year. This increase was primarily due to costs associated with the unusually high volume of the orders shipped in the first quarter of fiscal 2003 to one major distributor of research products.

General and administrative expenses increased by $1.2 million due to the increase in overall insurance costs of professional, directors & officers, liability insurance premiums and an increase in data processing personnel costs.

The Company's legal expenses increased by $3.6 million to $5.7 million from $2.1 million as compared to the previous year. This increase is primarily due to the increase in patent infringement proceedings and the increase in the overall legal activities on these infringement proceedings.

The Company's provision for uncollectible accounts receivable decreased by $5.5 million to $8.7 million from $14.2 million as compared to last year at the clinical laboratory division. The percentage of the provision for uncollectible accounts receivable as a relationship to revenue decreased to 30.8% this fiscal year as compared to 50.6% for last year. These decreases were primarily due to the change in the mix of payors and improved collection procedures and the effect of the canceled HMO contract last year. In addition, during the current fiscal year, the Company wrote off $.6 million as an uncollectible receivable from one of its distributors at the Life Science division.

Interest income was comparable to the prior fiscal year.

In fiscal 2003 and 2002, we recorded a provision for income taxes of $1.8 and $3.4 million, respectively, which was based on the combined effective federal, state and local income tax rates.

Net accounts receivable from our clinical laboratory operations of $14.4 million and $13.8 million represented an average of 174 days and 180 days of operating revenues at July 31, 2003 and 2002, respectively.

Income before provision for taxes on income from the research and development segment activities and related costs was $9.4 million in fiscal 2003, as compared to income before provision for taxes on income of $16.6 million in fiscal 2002. The decrease in the profit resulted primarily from a decrease in direct sales of research products of labeling and detection reagents for the genomics and sequencing markets to one specific customer. Income before provision for taxes on income from the clinical reference laboratories segment amounted to a $3.0 million for fiscal 2003, as compared to a loss of $3.8 million for fiscal 2002. The increase in income before taxes for the clinical laboratory segment was primarily due to the increase in revenue from an increase in higher gross margin reimbursement and an increase in volume of esoteric tests being ordered by physicians. These esoteric tests have higher pricing levels as compared to the regular tests performed at the laboratory.

Fiscal 2002 Compared to Fiscal 2001

Revenues from operations for the fiscal year ended July 31, 2002 were $54.0 million an increase of $1.8 million over revenues from operations for the fiscal year ended July 31, 2001. This increase was due to an increase of $8.9 million in revenues from our research product sales operations offset by a decrease of $7.1 million in revenues from clinical reference laboratory operation over revenues for such activities in fiscal 2001. The decline of clinical laboratory services revenue was due primarily to reduced reimbursement rates which have been experienced from various managed care agreements and the negative results of an unprofitable contract which was cancelled in fiscal 2002. Clinical laboratory services are provided to patients covered by various third party payor programs, including Medicare and health maintenance organizations ("HMO's"). Billings for services are included in revenue net of allowances for contractual discounts and allowances paid for differences between the amounts billed and the estimated amount to be paid. Recent trends had indicated a decrease in the collection rates from the Medicare Program, certain third party payors and HMO's. The effect of such reduced collection rates have been reflected in fiscal 2002. The increase in research product sales resulted primarily from an increase in direct sales of research products of labeling and detection reagents for the genomics and sequencing markets. The Company has certain non-exclusive distribution agreements, which provide for consideration to be paid to the distributors for the manufacture of certain products. Such consideration was previously included in cost of research product revenues. In accordance with recently issued accounting pronouncements, the Company has reclassified consideration provided to distributors under these non-exclusive distribution agreements as a reduction to research product revenues. The prior year's comparative amounts have been reclassified to be consistent with the current year presentation. This change reflects a new reporting presentation only and did not affect the Company's gross profit or net income as previously reported.

The cost of clinical laboratory services decreased by $.4 million primarily due to a decrease in direct operating expenses based on decreased volume of testing in fiscal 2002. The cost of sales for research products decreased as a result of improved efficiency in the manufacturing of the direct sales of research products.

Research and development expenses increased by approximately $.1 million as a result of an increase in the clinical trial studies.

Selling expenses increased by approximately $.5 million primarily due to an increase in costs associated with the increase in revenue.

General and administrative expenses decreased by approximately $1.0 million primarily due to the reduction in headcount and the related personnel costs associated with the canceled HMO contract at the clinical laboratory.

Legal expenses increased by approximately $.7 million due to the increase in the legal activities associated with the on-going patent infringement proceedings.

Our provision for uncollectible accounts receivable increased by $2.2 million, primarily due to the recent trends that indicated a decrease in the collection rates from the certain third party payors and HMO's. The effect of such reduced collection rates have been reflected in fiscal 2002.

Interest income decreased by $1.7 million as a result of a decrease in interest rates in fiscal 2002 as compared to fiscal 2001.

In fiscal 2002 and 2001, we recorded a provision for income taxes of $3.4 and $5.4 million, respectively, which was based on the combined effective federal, state and local income tax rates. In fiscal 2002, we realized the benefit of certain tax credits and certain extraterritorial income is excludable from taxes that resulted in a lower effective tax rate in fiscal 2002 as compared to fiscal 2001.

Net accounts receivable from our clinical laboratory operations of $13.8 million and $20.1 million represented an average of 180 days and 208 days of operating revenues at July 31, 2002 and 2001, respectively.

Income before provision for taxes on income from research and development activities and related costs was $16.6 million in fiscal 2002, as compared to income before provision for taxes on income of $8.3 million in fiscal 2001. The increase in the profit resulted primarily from an increase in direct sales of research products of labeling and detection reagents for the genomics and sequencing markets. Income (loss) before provision for taxes on income from the clinical reference laboratories activities amounted to a $3.8 million loss for fiscal 2002, as compared to $3.8 million of income for fiscal 2001. The loss is primarily due to the recent trends that indicated a decrease in the collection rates from the Medicare Program, certain third party payors and HMO's.

The Company does not have any "off-balance sheet arrangements" as such term is defined in Item 303(a)(4) of Regulation S-K.

Report of Independent Auditors

Board of Directors and Stockholders
Enzo Biochem, Inc.

We have audited the accompanying consolidated balance sheets of Enzo Biochem, Inc. (the "Company") as of July 31, 2003 and 2002, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended July 31, 2003. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States. 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 Enzo Biochem, Inc. at July 31, 2003 and 2002 and the consolidated results of their operations and their cash flows for each of the three years in the period ended July 31, 2003, in conformity with accounting principles generally accepted in the United States.

Melville, New York
October 15, 2003, except for the last paragraph of
Note 7, as to which the date is October 28, 2003.

ENZO BIOCHEM, INC
CONSOLIDATED BALANCE SHEETS

July 31, 2003 and 2002

ASSETS	**2003**	**2002**
Current assets:		
Cash and cash equivalents	$63,267,600	$67,135,000
Marketable securities	15,154,100	---
Accounts receivable, less allowance for doubtful accounts of $4,900,000 in 2003 and $4,445,000 in 2002	17,266,400	20,267,500
Inventories	3,421,800	4,190,200
Prepaid expenses	2,232,900	1,491,000
Deferred taxes	1,013,800	777,500
Prepaid taxes	542,300	1,968,600
Total current assets	102,898,900	95,829,800
Property and equipment, at cost less accumulated depreciation and amortization	2,199,800	2,301,100
Goodwill	7,452,000	7,452,000
Deferred patent costs, less accumulated amortization of $7,097,200 in 2003 and $6,347,100 in 2002	3,166,200	3,562,300
Other	161,000	146,200
	$115,877,900	$109,291,400
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Trade accounts payable	$1,321,000	$1,512,300
Accrued legal fees	1,915,200	140,000
Other accrued expenses	551,000	734,400
Accrued research and development expenses	453,400	---
Accrued payroll	703,000	475,900
Deferred rent	232,300	195,400
Total current liabilities	5,175,900	3,058,000
Deferred taxes	1,234,800	1,180,900
Deferred rent	87,000	319,300
Commitments and contingencies		
Stockholders' equity:		
Preferred Stock, $.01 par value; authorized 25,000,000 shares; no shares issued or outstanding		
Common Stock, $.01 par value; authorized 75,000,000 shares; shares issued and outstanding: 29,975,100 in 2003 and 28,459,800 in 2002	299,800	284,600
Additional paid-in capital	199,081,800	160,499,800
Accumulated deficit	(89,916,400)	(56,051,200)
Accumulated other comprehensive loss	(85,000)	---
Total stockholders' equity	109,380,200	104,733,200
	$115,877,900	$109,291,400

See accompanying notes.

ENZO BIOCHEM, INC.
CONSOLIDATED STATEMENT OF OPERATIONS

Years ended July 31, 2003, 2002 and 2001

	2003	2002	2001
Revenues:			
Research product revenues	$23,253,100	$25,963,400	$17,055,800
Clinical laboratory services	29,513,900	28,051,700	35,210,100
	52,767,000	54,015,100	52,265,900
Costs and expenses:			
Cost of research product revenues	2,188,900	737,100	785,200
Cost of clinical laboratory services	9,592,900	10,109,500	10,498,400
Research and development expense	8,311,200	6,178,600	6,080,800
Selling expense	4,706,100	4,342,800	3,856,300
Provision for uncollectible accounts receivable	9,345,300	14,188,400	11,999,200
Legal expense	5,661,000	2,111,000	1,425,000
General and administrative expense	8,591,300	7,358,200	8,392,800
	48,396,700	45,025,600	43,037,700
Income before interest income and provision for taxes on income	4,370,300	8,989,500	9,228,200
Interest income	1,355,000	1,350,400	3,003,000
Income before provision for taxes on income	5,725,300	10,339,900	12,231,200
Provision for taxes on income	(1,881,300)	(3,417,100)	(5,418,400)
Net income	$3,844,000	$6,922,800	$6,812,800
Net income per common share:			
Basic	$0.13	$0.23	$0.23
Diluted	$0.13	$0.22	$0.22
Denominator for per share calculation:			
Basic	29,904,000	29,866,000	29,766,000
Diluted	30,643,000	30,788,000	31,008,000

See accompanying notes

ENZO BIOCHEM, INC
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

Years ended July 31, 2003, 2002 and 2001

	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
Balance at July 31, 2000	25,583,700	$255,800	$97,349,600	($10,429,100)	---	$87,176,300
Net income for the year ended July 31, 2001	---	---	---	6,812,800	---	6,812,800
5% stock dividend (fair value on date declared)	1,284,500	12,800	32,260,700	(32,273,500)	---	---
Increase in common stock and paid-in capital due to exercise of stock options	202,200	2,000	1,231,900	---	---	1,233,900
Issuance of stock for employee 401(k) plan	9,700	100	230,700	---	---	230,800
Tax benefit from stock options exercised	---	---	1,780,000	---	---	1,780,000
Increase in paid-in capital due to stock issued for services performed	---	---	283,200	---	---	283,200
Balance at July 31, 2001	27,080,100	270,700	133,136,100	(35,889,800)	---	97,517,000
Net income for the year ended July 31, 2002	---	---	---	6,922,800	---	6,922,800
5% stock dividend (fair value on date declared)	1,353,500	13,600	26,974,000	(26,987,600)	---	---
Payment of cash for fractional shares for the 5% stock dividend	---	---	---	(96,600)	---	(96,600)
Increase in common stock and paid-in capital due to exercise of stock options	15,200	200	127,800	---	---	128,000
Tax benefit from stock options exercised	---	---	15,000	---	---	15,000
Issuance of stock for employee 401(k) plan	11,000	100	246,900	---	---	247,000
Balance at July 31, 2002	28,459,800	284,600	160,499,800	(56,051,200)	---	104,733,200
Net income for the year ended July 31, 2003	---	---	---	3,844,000	---	3,844,000
Net unrealized loss on available for-sale securities, net of tax	---	---	---	---	($85,000)	(85,000)
Comprehensive income						3,759,000
5% stock dividend (fair value on date declared)	1,423,600	14,300	37,694,900	(37,709,200)	---	---
Increase in common stock and paid-in capital due to exercise of stock options	73,300	700	630,100	---	---	630,800
Issuance of stock for employee 401(k) plan	18,400	200	257,000	---	---	257,200
Balance at July 31, 2003	29,975,100	$299,800	$199,081,800	($89,916,400)	($85,000)	$109,380,200

See accompanying notes

ENZO BIOCHEM, INC
CONSOLIDATED STATEMENT OF CASH FLOWS

Years ended July 31, 2003, 2002 and 2001

	2003	2002	2001
Cash flows from operating activities:			
Net income	$3,844,000	$6,922,800	$6,812,800
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization of property and equipment	1,058,000	989,900	1,131,200
Amortization of costs in excess of fair value of net tangible assets acquired	---	370,700	370,500
Amortization of deferred patent costs	750,000	793,600	750,600
Provision for uncollectible accounts receivable	9,345,300	14,188,400	11,999,200
Deferred income tax provision	(128,100)	720,000	2,003,000
Issuance of stock as compensation for services performed	---	---	283,200
Issuance of stock for employee 401(k) plan	257,200	247,000	230,800
Tax benefit from stock options exercised	---	15,000	1,780,000
Deferred rent	(195,400)	(160,300)	(120,700)
Changes in operating assets and liabilities:			
Accounts receivable before provision for uncollectible amounts	(6,344,200)	(9,896,900)	(16,347,000)
Inventories	768,400	(2,170,400)	(220,900)
Prepaid expenses	(741,900)	(358,700)	(61,200)
Prepaid taxes	1,426,300	(1,618,400)	(350,200)
Trade accounts payable and accrued expenses	(374,700)	(527,200)	504,000
Accrued research and development expenses	453,400	---	---
Income taxes payable	---	---	(375,700)
Accrued legal fees	1,775,200	(111,000)	(413,600)
Accrued payroll	227,100	153,600	20,900
Total adjustments	8,276,600	2,635,300	1,184,100
Net cash provided by operating activities	12,120,600	9,558,100	7,996,900
Cash flows from investing activities:			
Capital expenditures	(956,700)	(620,400)	(1,013,900)
Patent costs deferred	(353,900)	(490,700)	(567,900)
Purchase of marketable securities	(15,293,400)	---	---
Security deposits	(14,800)	(14,400)	(5,000)
Net cash used in investing activities	(16,618,800)	(1,125,500)	(1,586,800)
Cash flows from financing activities:			
Payment for fractional shares of stock dividend	---	(96,600)	---
Proceeds from the exercise of stock options	630,800	128,000	1,233,900
Net cash provided by financing activities	630,800	31,400	1,233,900
Net (decrease) increase in cash and cash equivalents	(3,867,400)	8,464,000	7,644,000
Cash and cash equivalents at the beginning of the year	67,135,000	58,671,000	51,027,000
Cash and cash equivalents at the end of the year	$63,267,600	$67,135,000	$58,671,000

See accompanying notes

Note 1 - Business and summary of significant accounting policies

Business

Enzo Biochem, Inc. (the "Company") is engaged in research, development, manufacturing and marketing of diagnostic and research products based on genetic engineering, biotechnology and molecular biology. These products are designed for the diagnosis of and/or screening for infectious diseases, cancers, genetic defects and other medically pertinent diagnostic information. The Company is conducting research and development activities in the development of therapeutic products based on the Company's technology platform of genetic modulation and immune modulation. The Company also operates a clinical reference laboratory that offers and provides diagnostic medical testing services to the health care community.

Summary of significant accounting policies

Principles of consolidation

The accompanying consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All intercompany transactions and balances have been eliminated.

Cash and cash equivalents

The Company considers all highly liquid debt instruments purchased with maturities of three months or less to be cash equivalents. Cash equivalents consist of short-term debt securities of domestic companies that the Company intends to hold to maturity through August 2003. The market values of these securities, as determined by quoted sources, aggregated $32,201,000 and $64,089,300 at July 31, 2003 and 2002, respectively, and approximated cost at the respective dates. The Company has approximately $28,295,500 and $0 in interest bearing money market accounts at July 31, 2003 and 2002, respectively.

Marketable securities

Management determines the appropriate classification of marketable securities at the time of purchase and reevaluates such designation as of each balance sheet date. The Company classifies its marketable securities as "available for sale" and, accordingly, carries these investments at their aggregate fair value. Unrealized gains or losses, net of tax, on these marketable securities are included as a separate component of stockholders' equity. Realized gains and losses and declines in value judged to be other-than-temporary on the marketable securities are included in investment income. The cost of securities sold is based on the specific identification method. The Company's marketable securities as of July 31, 2003 consisted of a high income bond mutual fund. This security carried a weighted average interest rate of approximately 2.77% at July 31, 2003.

Concentration of credit risk

Approximately 83% at July 31, 2003 and 69% at July 31, 2002, of the Company's net accounts receivable relates to its clinical reference laboratory business, which operates in the New York Metropolitan area. The Company believes that the concentration of credit risk with respect to clinical laboratory's accounts receivable is limited due to the diversity of the Company's client base and to the various numbers of insurance carriers and the numerous individual patient accounts. As is standard in the health care industry, substantially all of the Company's clinical laboratory's accounts receivable is with numerous third party insurance carriers and individual patient accounts. However, the Company provides services to certain patients covered by various third-party payors, including the Federal Medicare program. Revenue, net of contractual allowances, from direct billings under the Federal Medicare program during the years ended July 31, 2003, 2002 and 2001 were approximately 11%, 10% and 10%, respectively, of the Company's total revenue. The clinical reference laboratory industry is characterized by a significant amount of uncollectible accounts receivable related to the inability to receive accurate and timely billing information in order to forward it on to the third party payors for reimbursement, and the inaccurate information received from the covered individual patients for unreimbursed unpaid amounts. The Company's provision for uncollectible accounts receivable is within historical expectations.

Note 1 - Business and summary of significant accounting policies (Continued)

Research product revenue from one major distributor represented approximately 22%, 23% and 12% of the consolidated revenues in fiscal 2003, 2002 and 2001, respectively, under a non-exclusive distribution and supply agreement. Research product revenue from this one major distributor accounted for approximately 50% and 49% of the Company's total research product revenues in fiscal 2003 and 2002, respectively. At July 31, 2003 and 2002, 0% and 18% respectively of the Company's net accounts receivable relate to amounts due from the one major distributor.

Inventories

Inventories are stated at the lower of cost (first-in, first-out method) or market.

Property and equipment

Property and equipment is stated at cost, and depreciated on the straight-line basis over the estimated useful lives of the assets. Leasehold improvements are amortized over the term of the related leases or estimated useful lives of the assets, whichever is shorter.

Patent costs

The Company capitalizes legal costs directly incurred in pursuing patent applications as deferred patent costs under its research and development segment. When such applications result in an issued patent, the related costs are amortized over a ten year period, using the straight-line method. The Company reviews its issued patents and pending patent applications, and if it determines to abandon a patent application or that an issued patent no longer has economic value, the unamortized balance in deferred patent costs relating to that patent is immediately expensed.

Revenue Recognition

Revenues from services from the clinical reference laboratory are recognized when services are provided. The Company's revenue is based on amounts billed or billable for services rendered, net of contractual adjustments and other arrangements made with third-party payors to provide services at less than established billing rates. Revenues from research product sales, excluding certain non-exclusive distribution agreement revenues, are recognized when the products are shipped.

The Company has certain non-exclusive distribution agreements, which provide for consideration to be paid to the distributors for the manufacture of certain products. In accordance with EITF 00-25 and EITF 01-09, the Company records such consideration provided to distributors under these non-exclusive distribution agreements as a reduction to research product revenues. The revenue from these non-exclusive distribution agreements are recognized when shipments are made from the distributors to their respective customers and reported to the Company.

Reimbursement Contingencies

Laws and regulations governing Medicare are complex and subject to interpretation for which action for noncompliance includes fines, penalties and exclusion from the Medicare programs. The Company believes that it is in compliance with all applicable laws and regulations and is not aware of any pending or threatened investigations involving allegations of potential wrongdoing.

Shipping and Handling Costs

Research product revenue shipping and handling costs included in selling expense amounted to approximately $414,000, $325,000 and $279,000 for fiscal years ended July 31, 2003, 2002 and 2001, respectively.

Note 1 - Business and summary of significant accounting policies (Continued)

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and amounts of income and expenses during the reporting period. Actual results could differ from those estimates.

Income Taxes

The Company accounts for income taxes under the liability method of accounting for income taxes. Under the 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. The liability method requires that any tax benefits recognized for net operating loss carryforwards and other items be reduced by a valuation allowance where it is more likely than not that the benefits may not be realized. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. Under the liability method, 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.

Goodwill and other Intangibles

The Company follows the provisions of the Financial Accounting Standards Board ("FASB") Statement No. 142 ("SFAS 142"), Goodwill and Other Intangibles. Under SFAS 142, goodwill is no longer subject to amortization over its estimated useful life. Rather, goodwill is subject to at least an annual assessment for impairment by applying a fair-value based test. Additionally, an acquired intangible asset should be separately recognized if the benefit of the intangible asset is obtained through contractual or other legal rights, or if intangible asset can be sold, transferred, licensed, rented or exchanged, regardless of the acquirer's intent to do so. All of the Company's goodwill is related to their clinical reference laboratory segment. The Company adopted SFAS No. 142 as of August 1, 2002 and has performed the requisite impairment testing. The Company performed their annual impairment testing on the first day of the fourth quarter of their fiscal year. Based on this testing, there is no impairment to the goodwill recorded on the accompanying balance sheet.

SFAS 142 requires the disclosure of net income and earning per share computed on a pro forma basis by reversing the goodwill amortized in the periods presented. Such pro forma disclosures are required in the period of adoption and thereafter until all periods presented reflect goodwill accounted for in accordance with SFAS 142. The goodwill amortized in the years ended July 31, 2002 and 2001 was $370,700 and $370,500 respectively. Therefore, had SFAS 142 been effective prior to August 1, 2002, the Company's net income would have been $7,293,500 and $7,183,300 for the years ended July 31, 2002 and 2001 respectively. Basic net income per share would have been $.24 and $.24 for the years ended July 31, 2003 and 2002, respectively. Diluted net income per share would have been $.24 and $.23 for the years ended July 31, 2003 and 2002, respectively**.**

Impairment of Long-Lived Assets

The Company accounts for its investments in long-lived assets in accordance with FASB Statement No. 144 ("SFAS No. 144"), Accounting for the Impairment or Disposal of Long-Lived Assets and Long-Lived Assets. The Company adopted SFAS No. 144 on August 1, 2002. SFAS No. 144 requires a company to review its long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Factors the Company considers important, which could trigger an impairment review, include, among others, the following:

- a significant adverse change in the extent or manner in which a long-lived asset is being used;
- a significant adverse change in the business climate that could affect the value of a long-lived asset; and
- a significant decrease in the market value of assets.

Note 1 - Business and summary of significant accounting policies (Continued)

If the Company determines that the carrying value of long-lived assets may not be recoverable, based upon the existence of one or more of the above indicators of impairment, the Company compares the carrying value of the asset group to the undiscounted cash flows expected to be generated by the group. If the carrying value exceeds the undiscounted cash flows, an impairment charge may be needed. To determine the amount of the impairment charge, the Company compares the carrying value of the applicable asset group to its fair value. If the fair value is less than the carrying value, such amount is recognized as an impairment charge. As of July 31, 2003 the Company has not recorded an impairment charge.

Stock Dividend

The Company declared a 5% stock dividend on June 10, 2003 payable July 14, 2003 to shareholders of record as of June 30, 2003. The Company declared a 5% stock dividend on January 23, 2002 payable February 27, 2002 to shareholders of record as of February 2, 2002. The Company declared a 5% stock dividend on January 16, 2001 payable March 20, 2001 to shareholders of record as of February 27, 2001. The shares and per share data have been adjusted to retroactively reflect these stock dividends. The Company recorded a charge to accumulated deficit and a credit to common stock and additional paid-in capital in the amounts of approximately $37,709,000, $26,988,000 and $32,274,000 in fiscal 2003, fiscal 2002 and fiscal 2001, respectively, which reflects the fair value of the dividends on the dates of declaration.

Net income per share

The Company reported basic and diluted earnings per share in accordance with SFAS No. 128, "Earnings Per Share" ("SFAS No. 128"). Basic earnings per share exclude any dilutive effects of options and warrants. Diluted earnings includes the dilutive effects of common stock equivalents such as stock options and warrants.

The following table sets forth the computation of basic and diluted net income per share pursuant to SFAS No. 128.

	2003	2002	2001
Numerator:			
Net income for numerator for basic and diluted net income per common share	$3,844,000	$6,922,800	$6,812,800
Denominator:			
Denominator for basic net income per common share-weighted-average shares	29,904,000	29,866,000	29,766,000
Effect of dilutive employee and director stock options and warrants	739,000	922,000	1,242,000
Denominator for diluted net income per share-adjusted weighted-average shares	30,643,000	30,788,000	31,008,000
Basic net income per share	$.13	$.23	$.23
Diluted net income per share	$.13	$.22	$.22

Note 1 - Business and summary of significant accounting policies (Continued)

Basic earnings per share have been computed using the weighted-average number of shares of common stock outstanding. Diluted earnings per share has been computed using the basic weighted-average shares of common stock issued plus outstanding stock options and warrants, in the periods in which such options and warrants, have a dilutive effect under the treasury stock method.

Stock Compensation Plans

The Company accounts for stock option grants to employees under the recognition and measurement principles of APB Opinion No. 25, "Accounting for Stock Issued to Employees," and related Interpretations. Under APB No. 25, because the exercise price of the Company's employee stock options equals the market price of the underlying stock on the date of grant, no compensation expense is recorded.

Pro forma information regarding net loss applicable to common stockholders is required by FASB Statement No. 123 ("SFAS 123"), "Accounting for Stock-Based Compensation," which also requires that the information be determined as if the Company has accounted for its stock options under the fair value method of that statement. For purposes of pro forma disclosures, the estimated fair value of the options is amortized to expense over the options' vesting period. The fair value for these options was estimated using the Black-Scholes option-pricing model with the following weighted-average assumptions used for all grants in the years ended July 31, 2003, 2002, and 2001: no dividend yield, weighted-average expected life of the option of seven years, risk-free interest rate ranges of 3% to 6.88% and a volatility of .77, .78 and .80 for all grants.

In December 2002, the FASB issued Statement No. 148 ("SFAS 148"), "Accounting for Stock-Based Compensation – Transition and Disclosure." SFAS No. 148 amends SFAS No. 123, "Accounting for Stock-Based Compensation," to provide alternative methods of transition to SFAS No. 123's fair value method of accounting for stock-based employee compensation. SFAS No. 148 also amends the disclosure provisions of SFAS No. 123 to require disclosure in the summary of significant accounting policies of the effects of an entity's accounting policy with respect to stock-based employee compensation on reported net income. While SFAS No. 148 does not amend SFAS No. 123 to require companies to account for employee stock options using the fair value method, the disclosure provisions of SFAS No. 148 are applicable to all companies with stock-based employee compensation, method of SFAS No. 123 or the intrinsic value method of APB No. 25. The Company adopted SFAS No. 148 effective January 31, 2003. The implementation of SFAS No. 148 had no impact on the Company's consolidated financial statements as of and for the year ended July 31, 2003.

The following table illustrates the effect on net income if the Company had applied the fair value recognition provisions of SFAS No. 123 to stock-based compensation:

Year ended July 31,	2003	2002	2001
Reported net income…….	$3,844,000	$6,922,800	$6,812,800
Stock compensation expense included in net income…… ….	---	---	---
Pro forma compensation expense……..……..	(3,010,900)	(2,597,800)	(2,414,800)
Pro forma net income……...	$833,100	$4,325,000	$4,398,000
Pro forma earnings per share:			
Basic ……...	$.03	$.14	$.15
Diluted……... ..	$.03	$.14	$.14

Note 2 - Supplemental disclosure for statement of cash flows

In the years ended July 31, 2003, 2002 and 2001, the Company paid cash for income taxes of approximately $583,000, $4,300,000 and $2,267,000 respectively.

Note 3 – Marketable securities

The following is a summary of available-for-sale securities at July 31, 2003:

	Available-for-Sale Securities			
	Cost Basis	Gross Unrealized Gains	Gross Unrealized Loss	Fair Market Value
Mutual Fund	$15,293,400	$---	$139,300	$15,154,100

There were no realized gains during fiscal 2003 on the Company's marketable securities.

The following is a summary of income tax effects relating to other comprehensive income (loss):

	Before-Tax Amount	Tax (Expense) or Benefit	Net-of-Tax Amount
Fiscal 2003 unrealized loss……	$(139,300)	$54,300	$(85,000)
Balance at July 31, 2003……	$(139,300)	$54,300	$(85,000)

Note 4 - Inventories

At July 31, 2003 and 2002 inventories consist of:

	2003	2002
Raw materials.....	$167,900	$119,500
Work in process.....	2,057,900	2,635,700
Finished products.....	1,196,000	1,435,000
	$3,421,800	$4,190,200

Note 5 - Property and equipment

At July 31, 2003 and 2002 property and equipment consist of:

	2003	2002
Laboratory machinery and equipment.....	$1,866,700	$1,702,600
Leasehold improvements.....	2,327,400	2,257,400
Office furniture and equipment.....	4,896,500	4,313,800
	9,090,600	8,273,800
Accumulated depreciation and amortization.....	6,890,800	5,972,700
	$2,199,800	$2,301,100

These assets are stated at cost and are being depreciated and amortized over their estimated useful lives on a straight-line basis. Leasehold improvements are amortized over the term of the related leases or estimated useful lives of the assets, whichever is shorter. Expenditures for maintenance and repairs, which do not improve or extend the useful lives of the respective assets, are expensed as incurred.

Note 6 - Lease obligations

The Company leases its office and laboratory space under several leases that expire between August 31, 2002 and November 30, 2004. Certain officers / directors of the Company own the building that the Company uses as its main facility for laboratories and research and manufacturing. In addition to the minimum annual rentals of space, this lease is subject to an escalation clause. Rent expense under this lease approximated $1,302,000, $1,238,000 and $890,000 in fiscal 2003, 2002 and 2001, respectively.

The Company has various other operating leases for office and laboratory space, which expire through fiscal 2008.

Total consolidated rent expense incurred by the Company during fiscal 2003, 2002 and 2001 was approximately $1,742,000, $1,710,000 and $1,631,000 respectively. Minimum annual rentals under operating lease commitments for fiscal years ending July 31 are as follows:

2004	$1,837,000
2005	$774,000
2006	$231,000
2007	$167,000
2008	$139,000
	$3,148,000

Note 7 – Litigation

Patent Infringement

In June 1999, the Company filed suit in the United States District Court for the Southern District of New York against Gen-Probe Incorporated, Chugai Pharma U.S.A., Inc., Chugai Pharmaceutical Co., Ltd., bioMerieux, Inc., bioMerieux SA, and Becton Dickinson and Company, charging them with infringing the Company's U.S. Patent 4,900,659, which concerns probes for the detection of the bacteria that causes gonorrhea. On January 26, 2001, the court granted the defendants' motion for summary judgment that the Company's patent is invalid. On July 15, 2002, the Court of Appeals for the Federal Circuit reversed the judgment of invalidity and remanded the case to the district court for further proceedings. In March 2003, settlements have been reached with bioMerieux and Chugai; the settlements did not have a material monetary impact on the Company. There can be no assurance that the Company will be successful in the on-going proceedings. However, even if the Company is not successful, management does not believe that there will be a significant adverse monetary impact to the Company.

On March 6, 2002, the Company was named, along with certain of its officers and directors among others, in a complaint entitled Lawrence F. Glaser and Maureen Glaser, individually and on behalf of Kimberly, Erin, Hannah, and Benjamin Glasser v. Hyman Gross, Barry Weiner, Enzo Biochemical Inc., Elazar Rabbani, Shahram Rabbani, John Delucca, Dean Engelhardt, Richard Keating, Doug Yates and Docs 1-50, in the U.S. District Court for the Eastern District of Virginia. The complaint was filed by an investor in the Company who has filed for bankruptcy protection and his family. The complaint alleged securities and common law fraud and breach of fiduciary duty and seeks in excess of $150 million in damages. On August 22, 2002, the complaint was voluntarily dismissed; however a new substantially similar complaint was filed at the same time. On October 21, 2002, the Company and the other defendants filed a motion to dismiss the complaint, and the plaintiffs responded by amending the complaint and dropping their claims against defendants Keating and Yates. On November 18, 2002, the Company and the other defendants again moved to dismiss the Amended Complaint. On July 16, 2003, the Court issued a Memorandum Opinion dismissing the Amended Complaint in its entirety with prejudice. Plaintiffs thereafter moved for reconsideration but the Court denied the motion on September 8, 2003. The plaintiffs subsequently appealed to the Fourth Circuit and that appeal is presently pending. The Company does not believe that the complaint has any merit and was correctly dismissed, and intends to continue to defend the complaint vigorously in any event.

Note 7 – Litigation (Continued)

In March 2002, Enzo Life Sciences, a subsidiary of the Company, filed suit in the United States District Court for the District of Delaware against Digene Corp., charging it with infringing the Company's U.S. Patent No. 6,221,581 B1, which concerns a novel process for detecting nucleic acids of interest. On May 31, 2002, Digene filed counterclaims in that suit against Enzo Life Sciences and the Company, including business tort counterclaims relating to the '581 patent. Digene further contends that the Company has caused it substantial damage by interfering with business and financial opportunities. There can be no assurance that the Company and Enzo Life Sciences will be successful in these proceedings. However, even if Enzo Life Sciences is not successful in its patent infringement suit, management does not believe that there will be a significant adverse monetary impact to the Company. With respect to Digene's counterclaims, the Company and Enzo Life Sciences believe them to be without merit and intend to defend themselves vigorously. Trial is scheduled for March 2004.

In October 2002, the Company filed suit in the United States District Court of the Southern District of New York against Amersham plc, Amersham Biosciences, Perkin Elmer, Inc., Perkin Elmer Life Sciences, Inc., Sigma-Aldrich Corporation, Sigma Chemical Company, Inc., Molecular Probes, Inc. and Orchid Biosciences, Inc. In January 2003, the Company amended its complaint to include defendants Sigma Aldrich Co. and Sigma Aldrich, Inc. The counts set forth in the suit are for breach of contract; patent infringement; unfair competition under state law; unfair competition under federal law; tortuous interference with business relations; and fraud in the inducement of contract. The complaint alleges that these counts arise out of the defendants' breach of distributorship agreements with the Company concerning labeled nucleotide products and technology, and the defendants' infringement of patents covering the same. In April 2003, the Court directed that individual complaints be filed separately against each defendant. Enzo has done so and has added Yale University ("Yale") for technical reasons relating to its standing to enforce the four Yale patents of which Enzo is exclusive licensee. Yale and Enzo are aligned in protecting the validity and enforceability of the subject patents. In June 2003, the Court directed all parties to submit a stipulation setting forth dates for the completion of discovery. A stipulation to this effect is currently being negotiated and is likely to provide for discovery to take place through early 2004, with a trial to take place in 2004. Defendants have not yet answered the individual complaints although it is anticipated that the answers, when filed, will include a number of affirmative defenses and, possible, counterclaim. There can be no assurance that the Company will be successful in this litigation. However, even if the Company is not successful, management does not believe that there will be a significant adverse monetary impact to the Company.

On October 28, 2003, the Company and Enzo Life Sciences, Inc., a subsidiary of the Company, filed suit in the United States District Court of the Eastern District of New York against Affymetrix, Inc. The Complaint alleges that Affymetrix improperly transferred or distributed substantial business assets of the Company to third parties, including portions of the Company's proprietary technology, reagent systems, detection reagents and other intellectual property. The Complaint also charges that Affymetrix failed to account for certain shortfalls in sales of the Company's products, and that Affymetrix improperly induced collaborators and customers to use the Company's products in unauthorized fields or otherwise in violation of the agreement. The Complaint seeks full compensation from Affymetrix to the Company for its substantial damages, in addition to injunctive and declaratory relief to prohibit, among other things, Affymetrix's unauthorized use, development, manufacture, sale, distribution and transfer of the Company's products, technology, and/or intellectual property, as well as to prohibit Affymetrix from inducing collaborators, joint venture partners, customers and other third parties to use the Company's products in violation of the terms of the agreement and the Company's rights.

Note 8 - Income taxes

The tax provision is calculated under the provisions of SFAS No. 109.

	2003	2002	2001
Current			
Federal	$1,828,000	$2,211,600	$2,783,400
State and local	181,400	485,500	632,000
Deferred	(128,100)	720,000	2,003,000
Provision for income taxes	$1,881,300	$3,417,100	$5,418,400

Deferred income taxes arise from temporary differences between the tax basis of assets and liabilities and their reported amounts in the financial statements. The components of deferred income taxes are as follows:

	2003	2002
Deferred tax assets:		
Provision for uncollectible accounts Receivable	$837,100	$777,500
Other	176,700	208,300
	1,013,800	985,800
Deferred tax liability:		
Deferred patent costs	(1,234,800)	(1,389,200)
Net deferred tax liability	($221,000)	$(403,400)

In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion or the entire deferred tax asset will be realized. The ultimate realization of the deferred tax asset is dependent upon the generation of future taxable income. Management considers scheduled reversals of deferred tax liabilities, projected future taxable income and tax planning strategies that can be implemented by the Company in making this assessment.

The provisions for income taxes were at rates different from U.S. federal statutory rates for the following reasons:

	2003	2002	2001
Federal statutory rate	34%	34%	34%
Expenses not deductible for income tax return purposes	2%	2%	1%
State income taxes, net of federal tax deduction	3%	5%	9%
Benefit of foreign sales	(4%)	(4%)	---
Benefit of tax credits	---	(4%)	---
Other	(2%)	---	---
	33%	33%	44%

Note 9 - Stock options

The Company has an incentive stock option plan and a restricted stock incentive plan, as described below.

Incentive stock option plan

The Company has stock option plans ("1993 plan" and "1994 plan") under which the Company may grant options for up to 2,010,143 shares (1993 plan) and for up to 1,273,090 shares (1994 plan) of common stock. No additional options may be granted under the 1993 plan or the 1994 plan. In fiscal 1999, the Company set up a new incentive stock option plan ("1999 plan") under which the Company may grant up to 2,202,244 shares of common stock. The exercise price of options granted under such plans is equal to or greater than fair market value of the common stock on the date of grant. The options granted pursuant to the plans may be either incentive stock options or nonstatutory options. To date, the Company has only granted incentive stock options under these plans.

Note 9 - Stock options (Continued)

A summary of the information pursuant to the Company's stock option plans for the years ended July 31, 2003, 2002 and 2001 under SFAS No. 123 is as follows:

	2003		2002		2001	
	Options	Weighted - Average Exercise Price	Options	Weighted - Average Exercise Price	Options	Weighted-Average Exercise Price
Outstanding at beginning of year	2,706,096	$ 9.85	2,728,186	$9.29	2,541,363	$8.70
Granted	629,738	12.35	24,806	21.21	420,328	13.57
Exercised	(76,036)	7.19	(16,790)	7.70	(229,171)	5.14
Terminated	(24,477)	13.13	(30,106)	11.22	(4,334)	13.55
Outstanding at end of year	3,235,321	$10.37	2,706,096	$9.85	2,728,186	$9.29
Exercisable at end of year	2,371,431	$9.43	2,188,484	$9.25	1,875,790	$8.84
Weighted average fair value of options granted during year	$8.91		$14.89		$9.74	

The following table summarizes information for stock options outstanding at July 31, 2003:

	Options Outstanding			Options Exercisable	
Range of Exercise prices	Shares	Weighted-Average Remaining Contractual Life	Weighted-Average Exercise Price	Shares	Weighted-Average Exercise Price
$5.69 – 8.48	1,233,628	2.13 years	$7.03	1,233,927	$7.03
$8.74 – 12.86	1,784,900	6.68 years	$11.59	1,005,453	$10.95
$13.58 – 15.08	140,721	5.83 years	$15.69	93,395	$16.36
$21.21 – 25.64	58,708	4.41 years	$22.49	21,292	$23.00
$37.85	17,364	6.46 years	$37.85	17,364	$37.85
	3,235,321			2,371,431	

Incentive stock options generally become exercisable at 25% per year after one year and expire ten years after the date of grant.

Restricted stock incentive plan

The Company has a restricted stock incentive plan whereby the Company may award up to 268,019 shares of its common stock. Under the terms of the plan, any shares issued are restricted in regard to sales and transfers for a period of five years after award. Such restrictions begin to expire at 25% per year after the second year of ownership. As of July 31, 2003, the Company has not awarded any shares of common stock under this plan.

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As of July 31, 2003, the Company has reserved 3,453,192 shares under the arrangements described above.

Note 10 – Commitments

The Company has an exclusive licensing agreement to an invention covered by licensed patents. Under this agreement, the Company is required to make certain minimum royalty payments of $200,000 per year through the life of the patents.

Note 11 - Employee benefit plan

The Company has a qualified Salary Reduction Profit Sharing Plan (the "Plan") for eligible employees under Section 401(k) of the Internal Revenue Code. The Plan provides for voluntary employee contributions through salary reduction and voluntary employer contributions at the discretion of the Company. For the years ended July 31, 2003, 2002 and 2001, the Company has authorized employer contributions of 50% of the employees' contribution up to 10% of the employees' compensation in Enzo Biochem, Inc. common stock. The 401(k) employer contributions expense was $257,200, $247,000, and $230,800 in fiscal years 2003, 2002 and 2001, respectively.

Note 12 – Quarterly financial data (unaudited)

Unaudited quarterly financial data (in thousands, except per share amounts) for fiscal 2003 and 2002 is summarized as follows:

	Three Months Ended			
	October 31, 2002	January 31, 2003	April 30, 2003	July 31, 2003
Revenues	$17,356	$13,112	$11,640	$10,659
Gross profit	13,966	10,340	8,923	7,756
Income (loss) before provision for taxes on income	6,047	2,370	2,022	(4,714)
Net income (loss)	$3,688	$1,446	$1,233	($2,523)
Basic income (loss) per common share	$.13	$.05	$.04	($.08)
Diluted income (loss) per common share	$.13	$.05	$.04	($.08)

	Three Months Ended			
	October 31, 2001	January 31, 2002	April 30, 2002	July 31, 2002
Revenues	$13,386	$11,827	$15,021	$13,781
Gross profit	10,543	8,650	12,616	11,360
Income before provision for taxes on income	3,143	1,307	4,291	1,599
Net income	$1,825	$822	$2,551	$1,725
Basic income per common share	$0.06	$0.03	$0.09	$0.06
Diluted income per common share	$0.06	$0.03	$0.09	$0.06

Note 13--Segment Reporting

The Company has two reportable segments: research and development and clinical reference laboratories. The Company's research and development segment conducts research and development activities as well as selling products derived from these activities. The clinical reference laboratories provide diagnostic services to the health care community. The Company evaluates performance based on income before provision for taxes on income. The accounting policies of the reportable segments are the same as those described in the summary of significant accounting policies. Costs excluded from income before provision for taxes on income and reported as other consist of corporate general and administrative costs that are not allocable to the two reportable segments. Management of the Company assesses assets on a consolidated basis only and therefore, assets by reportable segment have not been included in the reportable segments below.

The following financial information (in thousands) represents the reportable segments of the Company:

	Research and Development Fiscal Year Ended July 31,			Clinical Reference Laboratories Fiscal Year Ended July 31,			Other Fiscal Year Ended July 31,			Consolidated Fiscal Year Ended July 31,		
	2003	2002	2001	2003	2002	2001	2003	2002	2001	2003	2002	2001
Operating revenues:												
Research product revenues……..	$23,253	$25,963	$17,056	---	---	---	---	---	---	$23,253	$25,963	$17,056
Clinical laboratory services……..	---	---	---	$29,514	$28,052	$35,210	---	---	---	29,514	28,052	35,210
Cost and expenses:												
Cost of research product revenues……	2,189	737	785	---	---	---	---	---	---	2,189	737	785
Cost of clinical laboratory services……	---	---	---	9,593	10,110	10,498	---	---	---	9,593	10,110	10,498
Research and development expense……...	8,311	6,179	6,081	---	---	---	---	---	---	8,311	6,179	6,081
Depreciation and amortization……...	881	923	856	893	1,231	1,397	$34	---	---	1,808	2,154	2,253
Provision for uncollectible accounts.....	616	---	---	8,729	14,188	11,999	---	---	---	9,345	14,188	11,999
Other costs and expenses……..	1,809	1,520	1,044	7,294	6,279	7,521	8,048	$3,858	$2,857	17,151	11,657	11,422
Interest income…….....	---	---	---	---	---	---	1,355	1,350	3,003	1,355	1,350	3,003
Income (loss) before provision for taxes on income……	$9,447	$16,604	$8,290	$3,005	$(3,756)	$3,795	($6,727)	($2,508)	$146	$5,725	$10,340	$12,231

The Company's reportable segments are determined based on the services they performed and the products they sell, not on the geographic area in which they operate. The Company's clinical reference laboratories segment operates 100% in the United States with all revenue derived from this country. The research and development segment earns revenue both in the United States and foreign countries. The following is a summary of research and development revenues attributable to customers located in the United States and foreign countries:

	2003	2002	2001
United States……	$19,492	$21,431	$14,257
Foreign Countries……	3,761	4,532	2,799
	$23,253	$25,963	$17,056

Corporate Information

Board of Directors

John J. Delucca
Former Chief Financial Officer
and Executive Vice President
Coty, Inc.

Irwin C. Gerson
Chairman Emeritus the Lowe
McAdams Healthcare division
Of the Interpublic Group

Melvin F. Lazar, CPA
Founding Partner
Lazar, Levine & Felix, LLP

Elazar Rabbani, Ph.D.
Chairman of the Board
Chief Executive Officer

Shahram K. Rabbani
Chief Operating Officer,
Treasurer and Secretary

John B. Sias
Former President and
Chief Executive Officer
Chronicle Publishing Co.

Stanford S. Warshawsky
Former Co-President
Arnhold and S. Bleidhroeder
Holdings

Barry W. Weiner
President and Chief Financial Officer

Officers and Management

Elazar Rabbani, Ph.D.
Chairman of the Board
Chief Executive Officer

Shahram K. Rabbani
Chief Operating Officer,
Treasurer and Secretary

Barry W. Weiner
President and Chief Financial Officer

Dean L. Engelhardt, Ph.D.
Executive Vice President

Norman E. Kelker, Ph.D.
Senior Vice President

Herbert B. Bass
Vice President, Finance

Barbara E. Thalenfeld, Ph.D.
Vice President,
Corporate Development

David C. Goldberg
Vice President,
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Ronald Fedus
Patent Counsel

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Corporate Subsidiaries

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Enzo Clinical Labs, Inc.
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General Counsel
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Weinstein, LLP
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Independent Auditors
Ernst & Young, LLP
395 North Service Road
Melville, NY 11747

Transfer Agent and Registrar
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Trust Company
59 Maiden Lane
New York, NY 10038

Common Stock
Listed on NYSE
(Symbol:ENZ)

A copy of the Company's annual report on Form 10-K, as filed with the Securities and Exchange Commission, will be furnished without charge to any shareholder upon written request to: Enzo Biochem, Inc. Attention: Investor Relations 527 Madison Avenue, New York, NY 10022.

Market for Registrant's Common Equity And Related Stockholder Matters

The common stock of the Company is traded on the New York Stock Exchange: (Symbol:ENZ). The following table sets forth the high and low sale price of the Company's Common Stock for the periods indicated as reported on the New York Stock Exchange.

	High	Low
2002 Fiscal Year (August 1, 2001 to July 31, 2002):		
1st Quarter	$28.88	$13.58
2nd Quarter	$26.13	$19.02
3rd Quarter	$21.99	$17.30
4th Quarter	$19.45	$11.09
2003 Fiscal Year (August 1, 2002 to July 31, 2003):		
1st Quarter	$16.40	$11.64
2nd Quarter	$15.86	$12.76
3rd Quarter	$15.23	$11.50
4th Quarter	$30.10	$14.78

As of October 7, 2003, the Company had approximately 1,212 record holders of its Common Stock.

The Company has not paid a cash dividend on its Common Stock and intends to continue to follow a policy of retaining future earnings to finance its operations. Accordingly, the Company does not anticipate the payment of cash dividends to holders of Common Stock in the foreseeable future.

The Company declared a 5% stock dividend on June 10, 2003 payable July 14, 2003 to shareholders of record as of June 30, 2003. The Company declared a 5% stock dividend on January 23, 2002 payable February 27, 2002 to shareholders of record as of February 2, 2002. The Company declared a 5% stock dividend on January 16, 2001 payable March 20, 2001 to shareholders of record as of February 27, 2001. The shares and per share data have been adjusted to retroactively reflect the stock dividends. The Company recorded a charge to accumulated deficit and a credit to common stock and additional paid-in capital in the amounts of approximately, $37,709,000, $26,988,000 and $32,274,000 in fiscal 2003, fiscal 2002 and fiscal 2001, respectively, which reflects the fair value of the dividends on the dates of declaration.

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