



FORM 10-K

THIRD WAVE TECHNOLOGIES INC /WI - TWTI

Filed: March 16, 2005 (period: December 31, 2004)

Annual report which provides a comprehensive overview of the company for the past year

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

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE
ACT OF 1934

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2004,

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934

FOR THE TRANSITION PERIOD FROM TO

COMMISSION FILE NUMBER: 000-31745

THIRD WAVE TECHNOLOGIES, INC.
(Exact name of Registrant as specified in its charter)

DELAWARE
(State or other jurisdiction of
incorporation or organization)

39-1791034
(I.R.S. Employer
Identification No.)

502 S. ROSA ROAD, MADISON, WI
(Address of principal executive offices)

53719
(Zip Code)

(888) 898-2357
(Registrant's telephone number, including area code)

SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE EXCHANGE ACT:
NONE

SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE EXCHANGE ACT:

COMMON STOCK, \$.001 PAR VALUE PER SHARE
PREFERRED STOCK PURCHASE RIGHTS
(Title of Class)

Indicate by check mark whether the registrant (1) has filed all reports
required to be filed by Section 13 or 15(d) of the Securities Exchange Act of
1934 during the preceding 12 months (or for such shorter period that the
registrant was required to file such reports), and (2) has been subject to such
filing requirements for the past 90 days. Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item
405 of Regulation S-K is not contained herein, and will not be contained, to the
best of the registrant's knowledge, in definitive proxy or information
statements incorporated by reference in Part III of this Form 10-K or any
amendment to this Form 10-K. Yes No

Indicate by check whether the Registrant is an accelerated filer (as
defined in Exchange Act Rule 12b-2 of the Exchange Act). Yes No

The aggregate market value of the registrant's voting stock held by
non-affiliates of the registrant (without admitting that any person whose shares
are not included in such calculation is an affiliate), computed by reference to
the last sale price of the common stock of the registrant on June 30, 2004, as
reported by The Nasdaq Stock Market, was \$153,402,137.

As of the close of business on March 10, 2005, the registrant had
41,152,891 shares of common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

The following documents (or parts thereof) are incorporated by reference
into the following parts of this Form 10-K: Certain information required in Part
III of this Annual Report on Form 10-K is incorporated from the Registrant's
Proxy Statement for the Annual Meeting of Stockholders to be held on June 14,
2005.

THIRD WAVE TECHNOLOGIES
FORM 10-K
FOR THE YEAR ENDED DECEMBER 31, 2004

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FORWARD-LOOKING STATEMENTS

This Form 10-K contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, and Section 27A of the Securities Act of 1933, as amended. When used in this Form 10-K, the words "believe," "anticipates," "intends," "plans," "estimates," and similar expressions are forward-looking statements. Such forward-looking statements contained in this Form 10-K are based on management's current expectations. Forward-looking statements may address the following subjects: results of operations; customer growth and retention; development of technologies; losses or earnings; operating expenses, including, without limitation, marketing expense and technology and development expense; and revenue growth. We caution investors that there can be no assurance that actual results, outcomes or business conditions will not differ materially from those projected or suggested in such forward-looking statements as a result of various factors, including, among others, our limited operating history, unpredictability of future revenues and operating results, competitive pressures and also the potential risks and uncertainties set forth in the "Overview" section of Item 7 hereof and in the "Risk Factors" section of Item 1 hereof.

You should also carefully consider the factors set forth in other reports or documents that we file from time to time with the Securities and Exchange Commission. Except as required by law, we undertake no obligation to update any forward-looking statements.

In this Form 10-K, we refer to information regarding our potential markets and other industry data. We believe that all such information has been obtained from reliable sources that are customarily relied upon by companies in our industry. However, we have not independently verified any such information.

In this Form 10-K, the terms "we," "us," "our," "Company" and "Third Wave" each refer to Third Wave Technologies, Inc. and its subsidiaries, unless the context requires otherwise.

In the United States, France and the United Kingdom our registered trademarks are Cleavase(R) and Invader(R). Cleavase, CFLP and Invader are registered in Germany. CFLP and Invader are also registered in Japan. A trademark application for InvaderCreator(TM) is pending in the United States, France, Germany, the United Kingdom and Japan. A trademark application is pending in the United States for Third Wave and Invader Plus.

PART I

ITEM 1. BUSINESS

OVERVIEW

Third Wave Technologies, Inc. develops and markets molecular diagnostics for a variety of DNA and RNA analysis applications, providing clinicians and researchers with superior molecular solutions. Our products are based on our proprietary Invader(R) chemistry. It is a novel, chemistry-based platform that we believe is easier to use, more accurate and cost-effective, and enables higher throughput compared to other methods of DNA and RNA analysis. Third Wave was incorporated in California in 1993 and reincorporated in Delaware in 2000.

The market of greatest application and commercial opportunity for Third Wave's Invader(R) chemistry is molecular diagnostics. We believe this market is approximately \$1.4 billion worldwide today, growing to \$2.4 billion by 2008. Within this market, there are a number of diverse segments, including genetics/pharmacogenetics, infectious disease/women's health, and oncology/chromosomal analysis, for which the Company's chemistry is particularly well-suited. In addition to this market of primary focus, the utility of the Invader(R) chemistry extends beyond molecular diagnostics to include research, agriculture/biotechnology ("Agbio") and other applications.

TECHNOLOGY

The Invader(R) Chemistry

The Invader(R) chemistry is a simple, scalable and accurate DNA and RNA analysis solution designed to enable any size highly-complex laboratory licensed under the Clinical Laboratory Improvement Amendments of 1988 ("CLIA") to provide patient results more quickly, increase throughput, and lower costs. The Invader(R) chemistry is a simple, isothermal, DNA probe-based reaction that detects specific genomic sequences or variations.

The Company announced during 2004 that it will enhance its product capabilities through the coupling of the performance and flexibility of the Invader(R) chemistry with the sensitivity of a rudimentary form of polymerase chain reaction whose patents expire at the end of March 2005. The Company believes that the combination of these two fundamental chemistries will bring the best of both to its customers, enabling them to perform complicated molecular testing more easily and more rapidly.

Third Wave has developed, and plans to continue to develop, a line of high-value, molecular diagnostic products based on its Invader chemistry for the following applications:

Clinical Applications

The Invader(R) chemistry is highly flexible and can be used for a number of clinical applications:

- Genetics/Pharmacogenetics - Detecting genetic variation associated with inherited conditions such as cystic fibrosis, hemostasis and cardiovascular risk factors, and those associated with drug efficacy and adverse drug reactions.
- Infectious Disease/Women's Health - Confirming diagnosis, quantifying viral load and genotyping to optimize therapy for infectious diseases such as hepatitis B and C, HIV and the human herpes virus family, and for detecting human papilloma virus (HPV) strains.

- Oncology/Chromosomal Analysis - Prenatal detection of genetic variation associated with chromosomal disorders and oncology applications including cancer detection and disease monitoring.

Other Applications

The Invader(R) chemistry is a universal detection and analysis solution for DNA and RNA. In addition to our growing menu of clinical products, there are a number of other Invader(R) applications including:

- Research - Tools and assays to facilitate research in existing and emerging applications.
- AgBio - Multiple DNA and RNA analysis tools for use in the field of agriculture.
- Other Applications - Potential application in areas including food and water testing, bioterrorism and blood screening.

THIRD WAVE MISSION AND CORPORATE STRATEGY

Third Wave's mission is to be a leading provider of superior molecular solutions. The Company seeks to achieve this mission by continuing to convert its proprietary Invader(R) molecular chemistry into valuable molecular diagnostic and research products.

To achieve our mission, we have implemented a strategy to:

- Grow our U.S. clinical molecular diagnostic revenue through our growing product menu by using our strong U.S. distribution and thought leader networks.
- Continue to expand our pipeline of molecular diagnostic products and enhance our product capabilities.
- Assess and, where appropriate, pursue incremental opportunities, e.g., the European and Japanese markets or additional product applications, above and beyond our primary focus of growing U.S. clinical molecular diagnostic revenue.
- Partner where necessary to optimize our opportunities in molecular diagnostics and in markets where the Invader(R) chemistry can create unique competitive advantages.

INDUSTRY BACKGROUND

Prior to the late 1990s, many diagnostic testing methods had limited accuracy and served primarily as guides to analysis. This is changing with the emergence of nucleic acid testing, also referred to as NAT or molecular diagnostic testing.

Nucleic acid testing is the direct analysis of DNA or RNA. Nucleic acid testing is accomplished through genotyping, determining whether a variation or series of variations are present in an individual, or gene expression analysis, determining the level of activity of a specific gene by quantitating the messenger RNA, or mRNA, it is producing. The accuracy and sensitivity advantages of this testing method allow for the direct detection of DNA and RNA, hereditary diseases, and pathogens, rather than monitoring antigens or antibodies. NAT was initially used primarily for HIV and blood screening, but it is rapidly displacing conventional testing methods as the industry standard for a variety of applications. For example, the need to perform accurate and high-throughput blood screening and tests for infectious diseases/viral loads has resulted in NAT replacing immunotechnology (immuno assays) as the solution of choice among many clinical labs.

Ongoing scientific research has helped determine that a majority of human diseases have genetic components. The monumental mapping and sequencing of the entire human genome, through the Human Genome Project and subsequent research initiatives, are being translated into precise clinical applications to diagnose and treat disease. As a result, hundreds of molecular diagnostic tests based on NAT technology are now being used to identify variations in DNA sequence to detect disease or highlight genetic predispositions. Furthermore, researchers' continuing progress in understanding disease and definitively linking particular diseases to an individual's DNA and RNA have caused key medical thought leaders to introduce new screening guidelines that incorporate NAT.

The availability of the human genome sequence, combined with an ever-growing list of known variations in DNA sequence and advances in our understanding of the cause and progression of disease, will likely result in the emergence of additional NAT applications. As a result, we believe that a significant increase in demand for gene-based tests will occur in the coming years.

LIMITATIONS OF CONVENTIONAL METHODS VERSUS THE THIRD WAVE SOLUTION

A limited number of chemistry platforms are presently capable of performing NAT, including the following:

NAME	PLATFORM	STATUS
PCR	Target Amplification	Most commonly used technology
TMA/NASBA	Target Amplification	Market leader for blood screening
Hybrid Capture	Signal Amplification	Currently used primarily for HPV testing
Ligation	Signal Amplification	Primarily used in cystic fibrosis testing
INVADER(R)	Signal Amplification	Rapid adoption across multiple applications
Invader Plus(TM)	Target/Signal Amplification	New capability for widespread applications

Today, many methods for analyzing genetic variations are based on hybridization in combination with polymerase chain reaction ("PCR").

We believe the Invader(R) and Invader Plus chemistries offer competitive advantages compared to the other forms of NAT, including:

- Exceptional Accuracy - The Invader(R) chemistry has demonstrated a level of accuracy surpassing the accuracy of other genetic analysis methods in multiple studies (see, e.g., Patnaik et.al. J. Mol Diagn 2004, 6:137-144).
- Ease of Use - Invader(R) products are extremely easy to use for technicians of any skill level. Assays are performed at a single temperature and require no laborious washing steps or gels. Assay setup requires a simple addition of the reagents to the sample and can be completed with minimal hands-on time. Following setup, the Invader(R) chemistry is hands-off. During the incubation at a single temperature, technicians are free to perform additional duties.
- Flexibility/Scalability - The Invader(R) chemistry is highly scalable, allowing any CLIA-high complexity lab, regardless of size, to take advantage of its benefits.
- Throughput - The Invader(R) chemistry offers customers a higher throughput potential than other methods, providing cost and time-saving benefits.

PRODUCTS AND PRODUCT CANDIDATES

Third Wave has applied the Company's proprietary Invader(R) chemistry to a number of molecular diagnostic, research and other applications. The Company has a pipeline of new products under development, which it anticipates releasing during 2005 and beyond. The Company is assessing the feasibility of a number of other applications.

Molecular Diagnostics

PRODUCTS ON THE MARKET

- HCV (Hepatitis C virus)
- CFTR (cystic fibrosis gene)
- CYP450 2D6 (drug response variability, adverse drug reactions)
- HPV (human papilloma virus)
- Connexin 26 (congenital hearing loss)

- Factor V Leiden (mutations associated with risk of increased coagulation)
- Factor II (mutations associated with risk of increased coagulation)
- MTHFR (metabolic enzyme associated with cardiovascular disease)
- ApoE (mutations associated with cardiovascular disease)

PRODUCTS IN DEVELOPMENT OR BEING ASSESSED FOR FEASIBILITY

- CFTR with microfluidic format (2005 release)
- Herpes Simplex Viruses 1 and 2 (2005 release)
- Varicella-Zoster Virus (2005 release)
- Cytomegalovirus (2005 release)
- Epstein-Barr Virus (2005 release)
- HCV Viral Load (quantification of virus multiplication for prognosis and therapy optimization)
- Chlamydia
- Gonorrhea
- HIV Viral Load
- HBV (strain determination and therapy optimization for Hepatitis B)
- Group B Streptococcus
- Subtelomere Scan (2006-2008 release)
- Microdeletion Syndromes (2006-2008 release)
- UGT1A1
- Fragile X
- Ashkenazi Jewish Mutations
- Various additional CYP450 Products (identification of drug response variability to minimize adverse drug reactions and optimize therapy)

The Company also has developed a number of DNA and RNA analysis products for the research and agricultural biotechnology markets.

Incremental Product Application Opportunities

We believe the Invader(R) chemistry has demonstrated potential for a number of additional applications outside of our primary area of focus. The Company has strategically chosen to approach each of these applications opportunistically instead of initiating active programs. These areas of incremental opportunity include:

- Blood screening
- Bioterrorism

- Food and water safety
- Environmental health and safety
- Wellness

MANUFACTURING

We currently manufacture products at our facility in Madison, Wisconsin. We also outsource the manufacture of select components intended for research applications. We work closely with the vendor of these components to optimize the manufacturing process, monitor quality control and ensure compliance with our product specifications.

Third Wave has sufficient capacity to meet our customer requirements, scalable manufacturing systems, and possesses the expertise to manufacture the Company's products.

Our molecular diagnostics products are produced in environmentally controlled rooms isolated from the rest of the facility. We have registered the facility used for manufacturing our clinical products with the U.S. Food and Drug Administration, or FDA, as a Device Manufacturer and we believe we are in substantial compliance with the FDA's quality system requirements or QSRs. The Company also has achieved ISO 13485:2003 Certification, a stringent, globally-recognized standard of quality management for medical device manufacturers.

MARKETING AND SALES

We currently market and sell our products in the United States through a combination of direct sales personnel, who are focused primarily on the clinical market, and through collaborative relationships. Our clinical sales force is comprised of 31 direct sales representatives and technical support personnel. We plan to increase our sales force as market demand requires. The clinical sales force targets high volume clinical and reference laboratories that meet the criteria for highly-complex CLIA laboratories.

Third Wave has more than 110 clinical testing customers in the United States. We serve most major clinical laboratories that perform molecular testing. Third Wave has established a strong and direct presence in Japan. Our products for the research market are sold primarily through collaborative relationships with research institutions and pharmaceutical companies focused on the life sciences in humans, plants, and animals. We also appear at industry trade shows in connection with our marketing efforts.

During 2004, the majority of our product sales were to international end customers, primarily in Japan. We intend to continue to pursue domestic and international market opportunities through a combination of direct sales, distribution arrangements and collaborative relationships. In 2002, we established a wholly-owned subsidiary for the purpose of working more directly with our customers, collaborators, and distributors in the Japanese market. We have two employees based in Japan. We also may establish direct international sales organizations in other select major markets. In 2004, Third Wave entered into a limited-term distribution arrangement for a limited number of its products in the European market with Innogenetics, N.V.

For a description of our industry segment and our product revenues by geographic area, see Note 11 of the Notes to the Consolidated Financial Statements included under Item 8 of this Form 10-K.

The Company's business is generally not seasonal.

COLLABORATIVE RELATIONSHIPS

Our business involves collaborations with clinical laboratory companies, instrument companies, pharmaceutical companies and academic institutions. We have entered into a number of collaboration agreements and continue to assess additional relationships for the supply, distribution and development of our products. The following is a summary of our principal collaborative relationships.

BML

In December 2000, Third Wave entered into a development and commercialization agreement with BML, Inc., ("BML"), one of the two largest clinical reference laboratories in Japan. Through this agreement, the companies are collaborating to develop and commercialize molecular diagnostics for infectious disease, genetic testing and pharmacogenomics. Under the agreement, Third Wave develops mutually agreed upon clinical assays, and BML reimburses development expenses and purchases final product. As provided by the terms of the agreement, Third Wave develops and supplies BML with clinical assays at preferential prices. Third Wave has certain rights to commercialize the developed assays worldwide; however, such commercialization rights are limited in Japan depending on BML's intellectual property surrounding the specific assay. Further, BML has the right to negotiate the terms and conditions under which BML would have the right to use the developed assays for providing clinical testing services in Japan. The term of the agreement is until December 31, 2009.

ACLARA BIOSCIENCES, INC./VIROLOGIC, INC.

In October 2002, Third Wave entered into limited license and supply agreements with ACLARA BioSciences, Inc. ("Aclara") under which Aclara has nonexclusive rights to incorporate our proprietary Invader(R) chemistry and Cleavase(R) enzyme with Aclara's eTag(TM) technology platform for multiplexed gene expression applications for the research market.

In exchange for the license, Aclara made up-front payments and will make royalty payments based on sales of the Aclara product. The license, supply and Invader Creator software access agreements supercede the research, development and collaboration agreement between the parties that was announced and executed in October 2001. On December 10, 2004, Aclara was acquired by Virologic, Inc.

UNIVERSITY OF TOKYO/RIKEN

In 2003, Third Wave entered into a collaboration with the University of Tokyo to support the genetic research efforts directed by Dr. Yusuke Nakamura, group director of the Research Group for Personalized Medicine at RIKEN and director of the Genome Center at the University of Tokyo. Dr. Nakamura is widely regarded as one of the world's leading genetic researchers and he is the leader of the Japanese portion of the International HapMap Project as well as other large-scale genotyping projects.

The HapMap Project is a worldwide initiative intended to create a map of common patterns of single nucleotide polymorphisms, or SNPs. SNPs are single-based variations scattered throughout the human genome and are believed to be the cause of most genetic variations from hair color to disease susceptibility. Researchers believe that mapping SNPs will assist in the understanding and analysis of human disease and drug response. In addition to its ongoing support of the HapMap related research, Third Wave also will support Dr. Nakamura for other research projects.

INTELLECTUAL PROPERTY

We have implemented a patent strategy designed to provide us with freedom to operate and facilitate commercialization of our current and future products. We currently own 34 issued U.S. patents, and hold exclusive licenses to two issued patents in the United States, own five issued patents in Australia, two issued patents in Canada and one issued European Cooperative patent. We have received notices of allowance for 6 additional U.S. patent applications. We have 53 additional U.S. patent applications pending. In addition, we have licensed rights to patent applications pending in the United States, Japan and other major industrialized nations, covering genetic variations associated with drug metabolism. We also have licensed rights to patents and/or patent applications covering genetic variations associated with certain diseases for which we have designed clinical diagnostic products. Reflecting our international business strategy, we have foreign filings in major industrialized nations corresponding to each major technology area represented in our U.S. patent and application claims.

Our issued, allowed and pending patents distinguish us from competitors by claiming proprietary methods and compositions for analysis of DNA and RNA, either genomic or amplified, using structure-specific cleavage processes and compositions. Issued and pending claims are included for assay design methods and compositions, as well as for use of the technology in various read-out formats such as fluorescence resonance energy transfer, mass spectrometry or in conjunction with solid supports such as micro latex beads or chips. We also have issued and pending claims covering oligonucleotide design production systems and methods. These methods also allow multiplexing or analysis of more than one sample in a single reaction, enabling the system to be easily amenable to a wide range of automated and non-automated detection methods.

The Company's issued U.S. patents will expire between 2012 and 2020. Our success depends, to a significant degree, on our ability to develop proprietary products and technologies. We intend to continue to file patent applications as we develop new products, technologies and patentable enhancements. Prosecution practices have been implemented to avoid any applicant delays that could compromise the guaranteed minimum patent term. There can be no guarantee, however, that such procedures will prevent the loss of a potential patent term.

Complex legal and factual determinations and evolving laws make patent protection uncertain. As a result, we cannot be certain that patents will be issued from any of our pending patent applications or from applications licensed to us or that any issued patents will have sufficient breadth to offer meaningful protection. In addition, our issued patents or patents licensed to us may be successfully challenged, invalidated, circumvented or found unenforceable so that our patent rights would not create an effective competitive barrier. Moreover, the laws of some foreign countries may not protect our proprietary rights to the same extent as do U.S. patent laws.

In addition to patent protection, we rely on copyright and trade secret protection of our intellectual property. We attempt to protect our trade secrets by entering into confidentiality agreements with third parties, employees and consultants. Our employees and consultants are required to sign agreements to assign to us their interests in discoveries, inventions, patents and copyrights arising from their work for us. They are also required to maintain the confidentiality of our intellectual property, and refrain from unfair competition with us during their employment and for a period of time after their employment with us, including solicitation of our employees and customers. We cannot be certain that these agreements will not be breached or invalidated. In addition, we cannot assure you that third parties will not independently discover or invent competing technologies or reverse engineer our trade secrets or other technologies.

In October 2000, we settled a dispute with ID Biomedical Corporation in which ID Biomedical had claimed that our products and processes infringed their patents. In the ID Biomedical settlement, we paid \$4.0 million in cash and issued 545,454 shares of common stock and, in exchange, ID Biomedical dismissed its lawsuit against us and agreed not to sue us, our affiliates, our customers and certain others for infringement of patents held by ID Biomedical. In December 2000, we entered into a licensing arrangement with Dade Behring in order to resolve an intellectual property dispute between us and Dade Behring.

In September 2002, we filed a patent infringement suit against EraGen Biosciences, Inc. The suit was filed in the U.S. District Court for the Western District of Wisconsin, located in Madison, Wisconsin. The complaint alleged that EraGen Biosciences, Inc. was infringing certain claims of two Company patents. In March 2003, the Court issued a favorable ruling confirming our interpretation of the patent claims at issue, resulting in a settlement between the two companies. As part of the EraGen settlement, we agreed to dismiss the lawsuit and to issue a covenant not to sue under certain of our patents. In exchange, EraGen agreed to cease and desist from the development and sale of its Gene Code products 1.0, 1.2 and 1.3 and agreed not to use technologies employing invasive cleavage.

In September 2004, we filed a patent infringement suit against Stratagene Corporation. This suit was filed in the same court as the EraGen case. The complaint alleges that Stratagene is infringing certain claims of the same two patents that the Company asserted against EraGen Biosciences, Inc. Stratagene counter-claimed for invalidity and non-infringement. Trial is currently scheduled for August 2005.

In the future, we may become involved in lawsuits in which third parties file claims asserting that our technologies or products infringe on their patents. We cannot predict whether third parties will assert such claims against us or against the licensors of technologies licensed to us, or whether such claims will harm our business. We may be forced to defend against such claims, whether they are with or without any merit or whether they are resolved in favor of or against us or our licensors, and may face costly litigation and diversion of management's attention and resources. As a result of such disputes, we may have to develop costly non-infringing technologies, or enter into licensing agreements. These agreements, if necessary, may be unavailable on terms acceptable to us, if at all, which could seriously harm our business and financial condition. We may also become involved in lawsuits in which third parties file claims asserting that our technologies or products infringe on their intellectual property. Certain technologies and product areas may relate to genes and genetic variations that are the subject of aggressive patent rights acquisitions by other parties. As a result, certain technologies and product areas can be characterized by complicated intellectual property considerations and overlapping rights between multiple independent parties. We are currently marketing and developing products to which some risk of intellectual property infringement litigation pertains. We cannot predict whether third parties may assert claims of infringement against us or against the licensors of technologies licensed to us.

COMPETITION

The markets for our technologies and products are very competitive, and we expect the intensity of competition to increase. Currently, we compete primarily with other companies that are pursuing technologies and products that provide alternatives to our technologies and products. Many of our competitors have greater financial, operational, sales and marketing resources and more experience in research and development than we have. Moreover, competitors may have greater name recognition than we do and may offer discounts as a competitive tactic. These competitors and other companies may have developed or could in the future develop new technologies that compete with our products or render our products obsolete.

We compete with many companies in the United States and abroad engaged in the development, commercialization and distribution of similar products intended for clinical molecular diagnostic applications. These companies may have or develop products competitive with the products offered by us. Also, clinical laboratories may offer testing services that are competitive with our products. Clinical laboratories may use reagents purchased from us or others to develop their own diagnostic tests. Such laboratory-developed tests may not be subject to the same requirements for clinical trials and FDA submission requirements that may apply our products.

In the clinical market, we potentially compete with several companies offering alternative technologies that differ from the Invader(R) chemistry. These companies include, among others: Abbott Laboratories, Bayer Corporation, Becton, Dickinson and Company, BioRad Laboratories, Inc., Digene Corp., Roche Diagnostics Corporation, Gen-Probe, Applera Corporation companies including Applied Biosystems and Celera, Innogenetics, Inc., TM Bioscience Corporation, and Ventana Medical Systems Inc.

In the research market, we compete with several companies offering alternative technologies that differ from the Invader(R) chemistry. These companies include, among others: Affymetrix, Inc., Illumina, Inc., and Applied Biosystems.

GOVERNMENT REGULATION

We are subject to regulation by the FDA under the Food, Drug and Cosmetic Act and other laws. The Food, Drug and Cosmetic Act requires that medical devices introduced to the U.S. market, unless otherwise exempted, be the subject of either a premarket notification clearance, known as a 510(k), or a premarket approval, known as a PMA. Some of our clinical products may require a PMA, others may require a 510(k). Other products, like analyte specific reagents, or ASRs, may be exempt from regulatory clearance or approval, but still subject to restrictions.

With respect to products reviewed through the 510(k) process, we may not market a product until an order is issued by the FDA finding our product to be substantially equivalent to a legally marketed product known as a predicate device. A 510(k) submission may involve the presentation of a substantial volume of data, including clinical data, and may require a substantial review. The FDA may agree that the product is substantially equivalent to a predicate device and allow the product to be marketed in the United States. The FDA, however, may determine that the device is not substantially equivalent and require a PMA, or require further information, such as additional test data, including data from clinical studies, before it is able to make a determination regarding substantial equivalence. If the FDA determines there is no predicate device, we may request that the FDA use the process known as de novo classification and then clear the device through a 510(k) filing, rather than a PMA. De novo classification is intended to be used for lower-risk products. By requesting additional information, the FDA can further delay market introduction of our products.

If the FDA indicates that a PMA is required for any of our clinical products, the application will require extensive clinical studies, manufacturing information and likely review by a panel of experts outside the FDA. Clinical studies to support either a 510(k) submission or a PMA application would need to be conducted in accordance with FDA requirements. Failure to comply with FDA requirements could result in the FDA's refusal to accept the data or the imposition of regulatory sanctions. There can be no assurance that we will be able to meet the FDA's requirements or receive any necessary approval or clearance.

Once granted, a 510(k) clearance or PMA approval may place substantial restrictions on how our device is marketed or to whom it may be sold. Even in the case of devices like ASRs, most of which are exempt from 510(k) clearance or PMA approval requirements, the FDA will impose restrictions on marketing. Our ASR products may be sold only to clinical laboratories certified under CLIA to perform high complexity testing. In addition to requiring approval or clearance for new products, the FDA may require approval or clearance prior to marketing products that are modifications of existing products. We cannot be assured that any necessary 510(k) clearance or PMA approval will be granted on a timely basis, or at all. Delays in receipt of or failure to receive any necessary 510(k) clearance or PMA approval or the imposition of stringent restrictions on the labeling and sales of our products could have a material adverse effect on us. We do not anticipate that our products that will be labeled for research use only, or RUO, or those products used in drug discovery or genomics research will be subject to significant government regulation. Our products labeled as ASRs or labeled for clinical use will be regulated as medical devices by the FDA and in certain other countries. We believe our products currently marketed pursuant to FDA regulations as ASRs, as well as those products we intend to market in the future as ASRs, are exempt from the 510(k) premarket notification and premarket approval requirements. However, certain of our products or their applications may require that we obtain, or we may choose to obtain, regulatory clearances or approvals. These products would include, for example, clinical products that we choose to market as in vitro diagnostic products rather than as ASRs. We expect that we will apply for FDA clearances or approvals for some of our future products.

As a medical device manufacturer, we are also required to register and list our products with the FDA. In addition, we are required to comply with the FDA's quality systems regulations, or QSRs, which require that our devices be manufactured and records be maintained in a prescribed manner with respect to manufacturing, testing and control activities. Further, we are required to comply with FDA requirements for labeling and promotion. For example, the FDA prohibits cleared or approved devices from being promoted for uncleared or unapproved uses. In addition, the medical device reporting regulation requires that we provide information to the FDA whenever there is evidence to reasonably suggest that one of our devices may have caused or contributed to a death or serious injury or that there has occurred a malfunction that would be likely to cause or contribute to a death or serious injury if the malfunction were to recur. Under FDA regulatory requirements, we may not make claims about the intended clinical use or efficacy of ASR products.

Our manufacturing facility is subject to periodic and unannounced inspections by the FDA for compliance with quality system regulations. Additionally, the FDA often will conduct a preapproval inspection for PMA devices. Although we believe we are in compliance with the FDA's quality system regulations, we have never been inspected by the FDA and cannot assure that we will be able to maintain compliance in the future. If the FDA believes that we are not in compliance with applicable laws or regulations, it can issue a warning letter, detain or seize our products, issue a recall notice, seek to enjoin future violations and assess civil and criminal penalties against us. In addition, approvals or clearances could be withdrawn under certain circumstances. Failure to comply with regulatory requirements or any adverse regulatory action could have a material adverse effect on us.

Any customers using our products for clinical use in the U.S. will be regulated under CLIA. CLIA is intended to ensure the quality and reliability of clinical laboratories in the United States by mandating specific standards in the areas of personnel qualifications, administration, participation in proficiency testing, patient test management, quality control, quality assurance and inspections. The regulations promulgated under CLIA establish three levels of diagnostic tests, namely, waived, moderately complex and highly complex, and the standards applicable to a clinical laboratory depend on the level of the tests it performs. We cannot assure you that the CLIA regulations and future administrative interpretations of CLIA will not have a material adverse impact on us by limiting the potential market for our products.

Medical device laws and regulations are also in effect in many of the countries in which we may do business outside the United States. These range from comprehensive device approval requirements for some or all of our medical device products, to requests for product data or certifications. The number and scope of these requirements are increasing. Medical device laws and regulations are also in effect in some states in which we do business. There can be no assurance that we will obtain regulatory approvals in such countries or that we will not incur significant costs in obtaining or maintaining foreign regulatory approvals. In addition, export of certain of our products that have not yet been cleared or approved for domestic commercial distribution may be subject to FDA export restrictions.

We are also subject to numerous environmental and safety laws and regulations, including those governing the use and disposal of hazardous materials. Any violation of and the cost of compliance with these regulations could have a material adverse effect on our business.

EMPLOYEES

As of December 31, 2004, we employed 140 persons, of whom 27 hold doctorate degrees and 93 hold other advanced degrees. Approximately 41 employees are engaged in research and development, 42 in business development, sales and

marketing, 26 in operations and manufacturing and 31 in intellectual property, finance and other administrative functions. Our success will depend in large part on our ability to attract and retain qualified employees. We face competition in this regard from other companies, research and academic institutions, government entities and other organizations. We believe that we maintain good relations with our employees.

RISK FACTORS

RISKS RELATED TO OUR BUSINESS

WE HAD AN ACCUMULATED DEFICIT OF \$135.8 MILLION AT DECEMBER 31, 2004, AND EXPECT TO CONTINUE TO INCUR SUBSTANTIAL OPERATING LOSSES FOR THE FORESEEABLE FUTURE.

We have had substantial operating losses since our inception in 1993, and we expect our operating losses to continue over the foreseeable future. We experienced net losses of \$1.9 million in 2004, \$8.1 million in 2003, and \$40.9 million in 2002. In order to further develop our products and technologies, including development of new products for the clinical market, we will need to incur significant expenses in connection with our internal research and development and commercialization programs. As a result, we expect to incur annual operating losses for the foreseeable future. In addition, there is no assurance that we will ever become profitable or that we will sustain profitability if we do become profitable. Should we experience protracted or unforeseen operating losses, our capital requirements would increase and our stock price would likely decline.

FLUCTUATIONS IN OUR QUARTERLY REVENUES AND OPERATING RESULTS MAY NEGATIVELY IMPACT OUR STOCK PRICE.

Our revenues and results of operations have fluctuated significantly in the past and we expect significant fluctuations to continue in the future due to a variety of factors, many of which are outside of our control. These factors include:

- the volume and timing of orders for our products;
- changes in the mix of our products offered;
- the timing of payments we receive under collaborative agreements, as well as our ability to recognize these payments as revenues;
- the number, timing and significance of new products and technologies introduced by our competitors;
- third-party intellectual property that may impede our ability to sell products;
- our ability to develop, obtain regulatory clearance, market and introduce new and enhanced products on a timely basis;
- changes in the cost, quality and availability of equipment, reagents and components required to manufacture or use our products;
- availability of commercial and government funding to researchers who use our products and services, including our single-largest research customer in Japan; and
- availability of third-party reimbursement to users of our clinical products.

Research and development costs associated with our products and technologies, as well as facilities costs, personnel costs, marketing programs and overhead account for a substantial portion of our operating expenses. Research and development expenses for the years ended December 31, 2004, 2003, and 2002 were \$11.6 million, \$12.0 million, and \$13.9 million, respectively. We cannot adjust these expenses quickly in the short term. If our revenues decline or do not grow as anticipated, we may not be able to reduce our operating expenses accordingly. Failure to achieve anticipated levels of revenues could significantly harm our operating results for one or more fiscal periods. Due to the possibility of fluctuations in our revenues and expenses, we believe that quarter-to-quarter comparisons of our operating results are not a good indication of our future performance. In addition, our operating results in a future fiscal quarter may not meet the expectations of stock market analysts and investors. In that case, our stock price would likely decline and investors would experience a decline in the value of their investment.

OUR TECHNOLOGIES AND COMMERCIAL PRODUCTS MAY NOT BE COMMERCIALY VIABLE OR SUCCESSFUL, WHICH COULD ADVERSELY AFFECT OUR BUSINESS.

We are currently developing and commercializing a limited number of products based on our technologies. We plan to develop additional products. We cannot assure you that we will be able to complete development of our products that are currently under

development or that we will be able to develop additional new products. In addition, for our genetic and pharmacogenetic products, some of the genetic variations for which we develop our products may not be useful or cost effective in assisting therapeutic selection, patient monitoring or diagnostic applications. In this event, our sales of products for these genetic variations would diminish significantly or cease, and we would not be able to recoup our investment in developing these products. Accordingly, if we fail to successfully develop our products and technologies or if our technologies are not useful in the development of commercially successful products, we may not achieve a competitive position in the market. If we fail to do so, our revenues will be seriously harmed and it is unlikely that we will ever achieve profitability. Market acceptance of our products will depend on widespread acceptance of such products by doctors and clinicians. The use of products to assess genetic variation, gene expression or identify infectious diseases is relatively new and remains uncertain. If clinicians and doctors do not adopt our products, our business, financial condition and results of operation could be adversely affected. In these events, our stock price would likely decline.

WE HAVE LIMITED MANUFACTURING EXPERIENCE AND MAY NEED TO MODIFY, EXPAND OR ESTABLISH NEW MANUFACTURING FACILITIES AS WE COMMERCIALIZE OUR PRODUCTS.

We have limited experience manufacturing our products and have limited experience manufacturing our products in the volumes that will be necessary for us to achieve significant commercial sales. We may need to establish new manufacturing processes or facilities, modify existing facilities and processes, or outsource product component manufacturing. Facilities expansion and development, process improvements, and outsourcing manufacturing can be delayed by unforeseen circumstances, including inability to obtain needed manufacturing equipment on a timely basis, difficulties with facility construction and completion of improvements and difficulties incorporating new processes and vendor supply issues associated with component outsourcing. If we fail to meet our manufacturing needs, we may not be able to provide our customers with the quantity of products they require, which would damage customer relations and result in reduced revenues. Additionally, some of our products must be manufactured in accordance with the FDA's QSRs. We have limited experience in manufacturing our products in compliance with QSRs and cannot guarantee that our manufacturing and production systems are in compliance with the QSRs.

Key components of our products may be sourced from single suppliers or a limited number of suppliers. Specifically, oligonucleotides for many of our research use only products are sourced from a single supplier. In addition, some of the components incorporated into our products may be proprietary and unavailable from secondary sources. Finally, to comply with QSRs, we must verify that our suppliers of key components are in compliance with all applicable FDA regulations and meet our standards for quality. The above factors all contribute to scenarios where we may not be able to arrange for alternative supply sources. If our suppliers are unable or unwilling to supply us on commercially acceptable terms with these components, we may be unable to satisfy demand for our product on reasonable terms, if at all, which may have an adverse effect on our business, financial condition and results of operations.

OUR LIMITED SALES AND MARKETING EXPERIENCE AND CAPACITY MAY ADVERSELY AFFECT OUR ABILITY TO GROW AND TO COMPETE SUCCESSFULLY IN COMMERCIALIZING OUR POTENTIAL PRODUCTS.

We currently have a relatively small sales force, consisting of 15 individuals focused on direct sales and 16 individuals focused on service and support in the clinical market. We will need to increase the size of our sales force as we further commercialize our products. In particular, as we introduce new clinical products, we will need to increase our clinical applications sales force. We are not currently able to estimate the number of new sales personnel we will require. However, this number could be significant and we may not be able to recruit, hire and train a sufficient number of sales personnel in a short time frame. We may also market our products through collaborations and distribution agreements with diagnostics, biopharmaceutical and life science companies. We cannot guarantee that we will be able to establish a successful sales force or to establish collaboration or distribution arrangements to market our products. If we are unable to implement an effective marketing and sales strategy, we will be unable to grow our revenues and execute our business plan. This would have an adverse effect on our business, financial condition and results of operations.

With respect to our clinical molecular diagnostics business, we have limited experience with sales of our products outside of the U.S. We cannot guarantee that we will successfully develop sales, distribution, product and customer support capabilities internationally that will enable us to generate significant revenue from sales outside the United States. In addition, sales made outside the U.S. are subject to foreign regulations typical to the sale and marketing of our products that may pose an additional risk for us. If we fail to increase our revenues from sales outside of the United States, this would have an adverse effect on our business, financial condition and results of operations.

Our clinical customer base is dominated by a small number of large clinical testing laboratories including Quest Diagnostics, Inc., Mayo Medical Laboratories, Specialty Laboratories, Inc., and Laboratory Corporation of America. If we are unable to increase sales, maintain current pricing levels, or if our new product introductions are not accepted by this small number of large clinical laboratory customers in the United States, our revenues and business may suffer materially.

WE MAY REQUIRE ADDITIONAL FINANCING FOR OUR FUTURE OPERATING PLANS.
FINANCING MAY NOT BE AVAILABLE ON ACCEPTABLE TERMS, IF AT ALL.

We anticipate that our existing capital resources together with cash from product sales will be sufficient to fund our operating and capital requirements for at least the next 12 months. We may, however, need to raise additional capital. We have expended significant resources and expect to continue to expend significant resources in our research and product development and commercialization activities and to improve production processes, litigate intellectual property disputes, and seek FDA clearance or approvals. The amount of additional capital we will need to raise will depend on many factors, including:

- our progress with our research and development programs;
- the needs we may have to pursue FDA clearances or approvals of our products;
- our level of success in selling our products and technologies;
- our ability to establish and maintain successful collaborations;
- the costs we incur in enforcing and defending our patent claims and other intellectual property rights; and
- the timing of purchases of additional capital.

In addition, we may require additional financing in less than 12 months if we:

- decide to expand faster than planned;
- develop new or enhanced products ahead of schedule;
- need to respond to competitive pressures; or
- decide to acquire complementary products, businesses or technologies.

If we raise additional funds through the sale of equity, convertible debt or other equity-linked securities, our shareholders' percentage 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. If future financing is not available to us or is not available on terms acceptable to us, we may not be able to fund our future needs that would have an adverse effect on our business, financial condition and results of operations.

COMMERCIALIZATION OF OUR TECHNOLOGIES MAY DEPEND ON STRATEGIC PARTNERSHIPS AND COLLABORATIONS WITH OTHER COMPANIES, AND IF OUR CURRENT OR FUTURE PARTNERSHIPS AND COLLABORATIONS ARE NOT SUCCESSFUL, WE MAY EXPERIENCE DIFFICULTY COMMERCIALIZING OUR TECHNOLOGIES AND PRODUCTS.

In order to augment our internal sales and marketing efforts and to reach additional product and geographic markets, we have entered into or may enter into strategic partnerships and collaborations for the development, marketing, sales or distribution of our products. These agreements provide us, in some instances, with distribution of our products, access to products and technologies that are complementary to ours and funding for development of our products. We may also be dependent on collaborators for regulatory approvals and clearances, and manufacturing in particular geographic and product markets. If our strategic partnerships and collaborations are not successful, we may not be able to develop or successfully commercialize the products that are the subject of the collaborations on a timely basis, if at all, or effectively distribute our

products. In addition, if we do not enter into additional partnership agreements, or if these agreements are not successful, our ability to develop, commercialize and distribute products will be negatively affected which will harm our future operating results.

We have no control over the resources that any partner or collaborator may devote to our products. Any of our present or future partners or collaborators may not perform their obligations as expected. These partners or collaborators may breach or terminate their agreements with us or otherwise fail to meet their obligations or perform their collaborative activities successfully and in a timely manner. Further, any of our partners or collaborators may elect not to develop products arising out of our partnerships or collaborations or devote sufficient resources to the development, manufacture, commercialization or distribution of these products. If any of these events occur, we may not be able to develop our products and technologies and our ability to generate revenues will decrease.

THE EARLY TERMINATION OF ANY OF OUR STRATEGIC COLLABORATION OR CUSTOMER SUPPLY AGREEMENTS COULD SERIOUSLY HARM OUR BUSINESS AND FINANCIAL CONDITION.

Certain of our strategic, research collaboration, customer supply agreements may be terminated with little or no notice. In particular, the supply of products to Japanese customers may be terminated upon specified notice at any time. These customers will likely account for a significant portion of our revenues for 2005. Accordingly, early termination of these relationships and supply agreements would seriously harm our revenues, and in turn, our business, and financial condition.

WE RELY ON A SINGLE CUSTOMER FOR A MAJORITY OF OUR BUSINESS AND THE LOSS OF THAT CUSTOMER, OR A REDUCTION OR CANCELLATION OF A SIGNIFICANT ORDER, COULD HARM OUR FINANCIAL CONDITION.

Approximately \$27.6 million, or 59%, of our revenue in 2004 was derived from sales to a major Japanese research institute, for use by several end-users. Sales to that research institute accounted for 69% and 51% of our revenue in 2003 and 2002, respectively. If we lose this customer, or if it significantly reduces purchases of our product, our business, financial condition and results of operations could be harmed.

WE ARE IN A HIGHLY COMPETITIVE INDUSTRY AND MARKETPLACE. COMPETITIVE DEVELOPMENTS, INCLUDING NEW TECHNOLOGIES THAT RENDER OURS LESS COMPETITIVE OR OBSOLETE, COULD SERIOUSLY HARM OUR BUSINESS.

The biotechnology and life sciences industries generally and the genetic analysis and molecular diagnostics markets specifically are highly competitive, and we expect the intensity of competition to increase. We compete with organizations in the United States and abroad that develop and manufacture products and provide services for the analysis of genetic information for research and/or clinical applications. These organizations include:

- diagnostic, biotechnology, pharmaceutical, healthcare, chemical and other companies;
- academic and scientific institutions;
- governmental agencies;
- public and private research organizations; and
- clinical labs.

Many of our competitors have greater financial, technical, research, marketing, sales, distribution, service and other resources than we do. Moreover, our competitors may offer broader product lines and have greater name recognition than we do, and may offer discounts as a competitive tactic. In addition, several development stage companies are currently making or developing technologies, products or services that compete with or are being designed to compete with our technologies and products. Our competitors may develop or market technologies, products or services that are more effective or commercially attractive than our current or future products, or that may render our technologies or products less competitive or obsolete. Competitors may make rapid technological developments which may result in our technologies and products becoming obsolete before we recover the expenses incurred to develop them or before they generate significant revenue or market acceptance. Competitors may also obtain regulatory advances or approvals of their diagnostic products more rapidly than we do. Accordingly, if competitors introduce superior technologies or products or obtain regulatory approvals or clearances quicker than we do, and we cannot make enhancements to our technologies and

products necessary for them to remain competitive, our competitive position, and in turn our business, revenues and financial condition, will be seriously harmed. This, in turn, would likely cause our stock price to decline.

Our existing and potential competitors may be in the process of seeking FDA or foreign regulatory approval for their respective products or may also enjoy substantial advantages over us in terms of research and development expertise, clinical trial expertise, experience in submission of products to regulatory authorities and the marketing or commercialization of FDA approved or cleared products. In addition, many of our competitors may have or will establish third-party reimbursement for their products. We may not be able to compete effectively against competitors that hold such an advantage which may have a material adverse effect on our business, financial condition and results of operations.

IF WE ARE UNABLE TO PROTECT OUR PROPRIETARY METHODS AND TECHNOLOGIES, WE MAY NOT BE ABLE TO COMMERCIALIZE PRODUCTS.

Our commercial success will depend, to a significant degree, on our ability to obtain patent protection on many aspects of our business, including the products, methods and services we develop. Patents issued to us may not provide us with substantial protection or be commercially beneficial to us. The issuance of a patent is not conclusive as to its validity or its enforceability.

In addition, our patent applications or those we have licensed, may not result in issued patents. If our patent applications do not result in issued patents, our competitors may obtain rights to commercialize our discoveries which would harm our competitive position.

We also may apply for patent protection on novel genetic variations in known genes and their uses, as well as novel uses for previously identified genetic variations discovered by third parties. In the latter cases or in the area of new product development, we may need a license from the holder of the patent with respect to such genetic variations in order to make, use or sell any related products. We may not be able to acquire such licenses on terms acceptable to us, if at all.

Certain parties are attempting to rapidly identify and characterize genes and genetic variations through the use of sequencing and other technologies. To the extent any patents are issued to other parties on such partial or full-length genes or genetic variations or uses for such genes or genetic variations, the risk increases that the sale of products developed by us or our collaborators may give rise to claims of patent infringement against us. Others may have filed and, in the future, are likely to file patent applications covering many genetic variations and their uses. Others may file and, in the future, may file, patent applications covering improvements to our technologies. Any such patent application may have priority over our patent applications and could further restrict our ability to market our products. We cannot assure you that any license that we may require under any such patent will be made available to us on commercially acceptable terms, if at all.

We may be sued for infringing on the intellectual property rights of others. We could also become involved in interference proceedings in the U.S. Patent and Trademark Office to determine the relative priority of our patents or patent applications and those of the other parties involved in the interference proceeding. Intellectual property proceedings are costly, and could affect our results of operations. We could also become involved in disputes regarding the ownership of intellectual property rights that relate to our technologies. These disputes could arise out of collaboration relationships, strategic partnerships or other relationships. These disputes and proceedings could also divert the attention of managerial and technical personnel. If we do not prevail in any intellectual property proceeding, 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. In interference proceedings, our patent rights could be invalidated and the scope of our patents could be limited. If we are unable to obtain licenses to intellectual property rights that we need to conduct our business, or are unable to design around any third party patent, we may be unable to sell some of our products, which will result in reduced revenue. Although the company has taken steps to respect the intellectual property of third parties and believes that its products do not infringe valid claims of other parties' patents, we may nevertheless be forced to defend against claims of patent infringement. In particular, third parties own multiple patents relating to the hepatitis C virus and the human papilloma virus. As a result, we may become involved in patent litigation relating to our HCV or HPV ASRs.

We have in the past and may in the future become a party to litigation involving patents and intellectual property rights. In October 2000, we settled a dispute with ID Biomedical Corporation in which ID Biomedical had claimed that our products and processes infringed their patents. In the ID Biomedical settlement, we paid \$4.0 million in cash and issued 545,454 shares of common stock and, in exchange, ID Biomedical dismissed its lawsuit against us and agreed not to sue us, our affiliates, our customers and certain others for infringement of patents held by ID Biomedical. In December 2000, we entered into a licensing arrangement with Dade Behring in order to resolve an intellectual property dispute between us and Dade Behring. In September 2002, we filed a patent infringement suit against EraGen Biosciences, Inc. alleging that certain

activities and products of the defendant infringes upon U.S. Patents issued to us. On April 9, 2003, we settled this litigation with EraGen's agreement to cease and desist from the development and sale of certain products and technologies. In September 2004, we filed a patent infringement suit against Stratagene Corporation. The complaint

alleges that Stratagene is infringing certain claims on two of the Company's patents. Trial is scheduled for August 2005. If we do not prevail in this litigation, Stratagene's products could diminish sales of our products.

We may in the future receive claims of infringement of intellectual property rights from other parties. If we do not prevail in any future legal proceedings, we may be required to pay significant monetary damages. In addition, we could also be enjoined from use of certain processes or prevented from selling certain configurations of our products that were found to be within the scope of the patent claims. In the event we did not prevail in any future proceeding, we would either have to obtain licenses from the other party, avoid certain product configurations or modify some of our products and processes to design around the patents. Licenses could be costly or unavailable on commercially reasonable terms. Designing around patents or focusing efforts on different configurations could be time consuming, and we would have to remove some of our products from the market while we were completing redesigns. Accordingly, if we are unable to settle future intellectual property disputes through licensing or similar arrangements, or if any such future disputes are determined adversely to us, our ability to market and sell our products could be seriously harmed. This would in turn harm our business, financial condition and results of operations.

In addition, in order to protect or enforce our patent rights or to protect our ability to operate our business, we may need to initiate other patent litigation against third parties. These lawsuits could be expensive, take significant time, and could divert management's attention from other business concerns. These lawsuits could result in the invalidation or limitation in the scope of our patents or forfeiture of the rights associated with our patents. We cannot assure you that we would prevail in any such proceedings or that a court will not find damages or award other remedies in favor of our opposing party in any of these suits. During the course of any future proceedings, there may be public announcements of the results of hearings, motions and 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.

OTHER RIGHTS AND MEASURES THAT WE RELY UPON TO PROTECT OUR INTELLECTUAL PROPERTY MAY NOT BE ADEQUATE TO PROTECT OUR PRODUCTS AND COULD REDUCE OUR ABILITY TO COMPETE IN THE MARKET.

In addition to patents, we rely on a combination of trade secrets, copyright and trademark laws, nondisclosure agreements and other contractual provisions and technical measures to protect our intellectual property rights. While we require employees, collaborators, consultants and other third parties to enter into confidentiality and/or non-disclosure agreements where appropriate, any of the following could still occur:

- the agreements may be breached;
- we may have inadequate remedies for any breach;
- the employees, collaborators, consultants and other third parties may apply for patents on improvements to our technologies without assigning ownership rights to us;
- proprietary information could be disclosed to our competitors; or
- others may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets or disclose such technologies.

If for any of the above reasons our intellectual property is disclosed, invalidated or misappropriated, it would harm our ability to protect our rights and our competitive position.

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 REVENUES.

Our future success will depend on the continued services and on the performance of our senior management, scientific staff, and key employees.

If a competitor hired members of our senior management staff, scientific staff, or key employees, or if for any reason these employees would not continue to work for us, we would have difficulty hiring employees with equivalent skills.

In addition, our researchers, scientists and technicians have significant experience in research and development related to the analysis of genetic variations. If we were to lose these employees to our competitors, we could spend a significant amount of time and resources to replace them, which could impair our research and development efforts. Further, in order to scale up our commercialization activity and to further our research and development efforts, we will need to hire, train and retain additional sales, marketing, research, scientific, and technical personnel. If we are unable to hire, train and retain the personnel we need, we may experience delays in the research, development and commercialization of our technologies and products. This would result in reduced revenues and would harm our results of operations.

WE PLAN TO CONTINUE TO INTRODUCE PRODUCTS FOR THE CLINICAL MARKET, AND WE MAY NEED TO OBTAIN FDA CLEARANCES AND APPROVALS AND COMPLY WITH FDA QUALITY SYSTEM REGULATIONS AND OTHER REGULATIONS RELATING TO THE MANUFACTURING, MARKETING AND SALE OF CLINICAL PRODUCTS.

We anticipate that the manufacturing, labeling, distribution and marketing of a number of our clinical diagnostic products will be subject to extensive regulation in the United States and in certain other countries.

In the United States, the FDA regulates, as medical devices, most diagnostic tests and in vitro reagents that are marketed as finished test kits. Some clinical laboratories, however, purchase products that are marketed under FDA regulations as analyte specific reagents, and develop and prepare their own finished diagnostic tests. FDA also considers ASRs to be medical devices. The FDA restricts the sale of these products to clinical laboratories certified under CLIA to perform high complexity testing and also restricts the types of products that can be sold as ASRs. We currently market our diagnostic products as ASRs. Consequently, these clinical products will be regulated as medical devices. Should the FDA modify the ASR rules or its interpretation and enforcement of them in a fashion that makes it difficult or impossible for us to market some or all of our products, we may be required to terminate those ASR product sales, conduct clinical studies and make submissions of our products to the FDA for clearance or approval. In that event, we could experience significant revenue loss, additional expenses and loss of our clinical customer base which would cause the market price of our stock to decline.

Unless otherwise exempt, medical devices require FDA approval or clearance prior to marketing in the United States. Although we believe our currently marketed products, as well as those ASRs we intend to market in the future, are exempt from 510(k) premarket notification and premarket approval requirements, the process of obtaining approvals and clearances necessary to market our proposed clinical products can be time-consuming, expensive and uncertain. To date, we have not applied for FDA or any other regulatory approvals or clearances with respect to any of our clinical diagnostic products. We plan to seek FDA approvals or clearances for certain products starting in 2005, and we cannot predict the likelihood of obtaining those approvals or clearances. Also, clinical products that we may seek to introduce in the future may require FDA approvals or clearances prior to commercial sale in the United States. We may experience difficulties that could delay or prevent the successful development, introduction and marketing of new clinical products. In particular, the FDA may look closely at our HCV product, our HPV product when released as an ASR and our CFTR gene ASR when released in a microfluidic card format. In addition, we cannot assure that regulatory approval or clearance of any clinical products for which we seek such approvals will be granted by the FDA or foreign regulatory authorities on a timely basis, if at all. Furthermore, in the event that the regulatory safe-haven provided to ASRs is eliminated by the FDA, we could experience significant revenue loss, additional expenses and loss of our clinical customer base which would cause the market price of our stock to decline.

If approval or clearance is obtained we will be subject to continuing FDA obligations. When manufacturing medical devices, including ASRs, we will be required to adhere to Quality System Regulations, which will require us to manufacture our products and maintain records in a prescribed manner. We have never been subject to an FDA Quality System inspection, and we cannot assure that we can pass an FDA audit or maintain compliance in the future. Further, the FDA may place substantial restrictions on the indications for which our products may be marketed or to whom they may be marketed. Additionally, there can be no assurance that FDA will not require us to conduct clinical studies as a condition of approval or clearance. Failure to comply with applicable FDA requirements can result in, among other things:

- administrative or judicially imposed sanctions;
- injunctions, civil penalties, recall or seizure of our products;
- total or partial suspension of production;
- failure of the government to grant premarket clearance or premarket approval for our products;

- withdrawal of marketing clearances or approvals; and
- criminal prosecution.

Any of our customers using our products for clinical use in the United States may be regulated under CLIA. CLIA is intended to ensure the quality and reliability of clinical laboratories in the United States by mandating specific standards in the areas of personnel qualification, administration, participation in proficiency testing, patient test management, quality control, quality assurance and inspections. The regulations promulgated under CLIA establish three levels of clinical tests and the standards applicable to a clinical laboratory depend on the level of the tests it performs. CLIA requirements may prevent some clinical laboratories, including those laboratories that do not comply with those requirements, from using some or all of our products. In addition, CLIA regulations and future administrative interpretations of CLIA could harm our business by limiting the potential market for some or all of our products.

OUR FAILURE TO COMPLY WITH ANY APPLICABLE ENVIRONMENTAL, HEALTH, SAFETY AND RELATED GOVERNMENT REGULATIONS MAY AFFECT OUR ABILITY TO DEVELOP, PRODUCE OR MARKET OUR POTENTIAL PRODUCTS AND MAY ADVERSELY AFFECT OUR RESULTS OF OPERATIONS.

Our research, development and manufacturing activities involve the use, transportation, storage and disposal of hazardous materials and are subject to related environmental and health and safety statutes and regulations. As we expand our operations, our increased use of hazardous substances will lead to additional and more stringent requirements. This may cause us to incur substantial costs to maintain compliance with applicable statutes and regulations. In addition, we are obligated to file a report to the U.S. Environmental Protection Agency, or EPA, regarding specified types of microorganisms we use in our operations. The EPA could, upon review of our use of these microorganisms, require us to discontinue its use. If this were to occur, we would have to substitute a different microorganism from the EPA's approved list. We could experience delays or disruptions in production while we convert to the new microorganism. In addition, any failure to comply with laws and regulations and any costs associated with unexpected and unintended releases of hazardous substances by us into the environment, or at disposal sites used by us, could expose us to substantial liability in the form of fines, penalties, remediation costs or other damages and could require us to shut down our operations. Any of these events would seriously harm our business and operating results.

WE MAY BE HELD LIABLE FOR ANY INACCURACIES ASSOCIATED WITH GENETIC ANALYSIS TESTS PERFORMED USING OUR PRODUCTS, WHICH MAY REQUIRE US TO DEFEND OURSELVES IN COSTLY LITIGATION.

We may be subject to claims resulting from incorrect results of analysis of genetic variations or other screening tests performed using our products. Litigation of these claims can be costly. We could expend significant funds during any litigation proceeding brought against us. Further, if a court were to require us to pay damages to a plaintiff, the amount of such damages could significantly harm our business, financial condition and results of operations.

IF OUR VENDORS FAIL TO SUPPLY US WITH COMPONENTS FOR WHICH AVAILABILITY IS LIMITED, WE MAY EXPERIENCE DELAYS IN OUR PRODUCT DEVELOPMENT AND COMMERCIALIZATION.

Certain key components of our manufacturing equipment and products are currently available only from a single source or a limited number of sources. We currently rely on outside vendors to manufacture certain components of our products and certain reagents we provide in our products. Some or all of these key components may not continue to be available in commercial quantities at acceptable costs. It could be time consuming and expensive for us to seek alternative sources of supply. Consequently, if any events cause delays or interruptions in the supply of our components, we may not be able to supply our customers with our products on a timely basis which would adversely affect our results of operations.

RELIANCE ON COMPUTER HARDWARE, SOFTWARE AND APPLICATIONS FOR OPERATIONS

We depend on the continuous, effective, reliable and secure operation of our computer hardware, software, networks, servers, related infrastructure and applications for the successful operations of our business. Should we encounter difficulties with such systems, our business, financial condition and results of operations could be negatively impacted.

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 10,000,000 shares of preferred stock and to determine the price, privileges and other terms of these shares without any further approval of our stockholders. The rights of the holders of common stock may be adversely affected by the rights of our holders of our preferred stock that may be issued in the future.

AUTHORIZED STOCK BUY BACK PROGRAM MAY DIMINISH OUR CASH RESERVES

Our Board of Directors has authorized the Company to acquire on behalf of the Company, from time to time, in the open market or through private transactions, shares of the common stock of the Company at prices approximating then existing market prices, provided that such repurchase program does not exceed 5% of the outstanding common stock of the Company. The use of the Company's cash for such a repurchase program may or may not have a negative impact on company performance or stock price.

WE HAVE VARIOUS MECHANISMS IN PLACE THAT A STOCKHOLDER MAY NOT CONSIDER FAVORABLE AND WHICH MAY DISCOURAGE UNSOLICITED TAKEOVER ATTEMPTS.

Certain provisions of our certificate of incorporation and bylaws, as well as Section 203 of the Delaware General Corporation Law, may discourage, delay or prevent changes in our board of directors, executive officers or other senior management. These provisions may also be used by incumbent management to delay a change of control or acquisition of our Company. These provisions include:

- authorizing our Board of Directors to issue preferred stock and to determine the price, privileges and other terms of these shares without any further approval of our stockholders, which could increase the number of outstanding shares or thwart an unsolicited takeover attempt;
- establishing a classified Board of Directors with staggered, three-year terms, which may lengthen the time required to gain control of our Board of Directors;
- prohibiting cumulative voting in the election of directors, which would allow a majority of stockholders to control the election of all directors;
- requiring super-majority voting to effect certain amendments to our certificate of incorporation and bylaws;
- limiting who may call special meetings of stockholders;
- prohibiting stockholder action by written consent, which requires all actions to be taken at a meeting of stockholders; and
- establishing advance notice requirements for nominations of candidates for election to the Board of Directors or for proposing matters that can be acted upon by stockholders at stockholder meetings.

A change of control could be beneficial to stockholders in a situation in which the acquisition price being paid by the party seeking to acquire us represented a substantial premium over the prevailing market price of our common stock. If our board of directors were not in favor of such a transaction, the provisions of our certificate of incorporation and bylaws described above could be used by our board of directors to delay or reduce the likelihood of completion of the acquisition.

OUR DIRECTORS, EXECUTIVE OFFICERS AND PRINCIPAL STOCKHOLDERS WILL HAVE SUBSTANTIAL CONTROL OVER OUR AFFAIRS.

As of February 14, 2005, our directors, executive officers and principal stockholders beneficially owned, in the aggregate, approximately 21% of our common stock. These stockholders, acting together, will have the ability to exert substantial influence over all matters requiring approval by our stockholders. These matters include the election and removal of directors and any merger, consolidation or sale of all or substantially all of our assets. In addition, they may dictate the management of our business and affairs. This concentration of ownership could have the effect of delaying, deferring or preventing a change in control, or impeding a merger or consolidation, takeover or other business combination of which you might otherwise approve.

RISKS RELATED TO THE BIOTECHNOLOGY INDUSTRY

PUBLIC OPINION REGARDING ETHICAL ISSUES SURROUNDING THE USE OF GENETIC INFORMATION MAY ADVERSELY AFFECT DEMAND FOR OUR PRODUCTS.

Public opinion regarding ethical issues related to the confidentiality and appropriate use of genetic testing results may influence governmental authorities to call for limits on, or regulation of the use of, genetic testing. In addition, such authorities could prohibit testing for genetic predisposition to certain conditions, particularly for those that have no known cure. Furthermore, adverse publicity or public opinion relating to genetic research and testing, even in the absence of any governmental regulation, could harm our business. Any of these scenarios could reduce the potential markets for our products, which could materially and adversely affect our revenues.

GOVERNMENT REGULATION OF GENETIC RESEARCH OR TESTING MAY ADVERSELY AFFECT THE DEMAND FOR OUR PRODUCTS AND IMPAIR OUR BUSINESS AND OPERATIONS.

Federal, state and local governments may adopt further regulations relating to the conduct of genetic research and genetic testing. These new regulations could limit or restrict genetic research activities as well as genetic testing for research or clinical purposes. In addition, if state and local regulations are adopted, these regulations may be inconsistent with, or in conflict with, regulations adopted by other state or local governments. Regulations relating to genetic research activities could adversely affect our ability to conduct our research and development activities. Regulations restricting genetic testing could adversely affect our ability to market and sell our products. Accordingly, any regulations of this nature could harm our business.

HEALTH CARE COST CONTAINMENT INITIATIVES COULD LIMIT THE ADOPTION OF GENETIC TESTING AS A CLINICAL TOOL, WHICH WOULD HARM OUR REVENUES AND PROSPECTS.

In recent years, health care payors as well as federal and state governments have focused on containing or reducing health care costs. We cannot predict the effect that any of these initiatives may have on our business, and it is possible that they will adversely affect our business. Health care cost containment initiatives focused on genetic testing could cause the growth in the clinical market for genetic testing to be curtailed or slowed. In addition, health care cost containment initiatives could also cause pharmaceutical companies to reduce research and development spending. In either case, our business and our operating results would be harmed. In addition, genetic testing in clinical settings is often billed to third-party payors, including private insurers and governmental organizations. If our current and future clinical products are not considered cost-effective by these payors, reimbursement may not be available to users of our products. In this event, potential customers would be much less likely to use our products, and our business and operating results would be seriously harmed.

REIMBURSEMENT FOR USE OF OUR TESTS

Sales of our products will depend, in large part, on the availability of adequate reimbursement to users of those products from government insurance plans, managed care organizations and private insurance plans. Physicians' recommendations to use our products are likely to be influenced by the availability of reimbursement by insurance companies and other third-party payors. There can be no assurance that insurance companies or third-party payors will provide or continue to provide coverage for our products or that reimbursement levels will be adequate for the reimbursement of the providers of our products. In addition, outside the United States, reimbursement systems vary from country to country and there can be no assurances that third-party reimbursement will be made available at an adequate level, if at all, for our products under any other reimbursement system. Lack of or inadequate reimbursement by government or other third-party payors for our products would have a material adverse effect on our business, financial condition and results of operations.

AVAILABLE INFORMATION

The Company makes available financial information, news releases and other information on its Web site at www.twt.com. The Company's annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, its Code of Business Conduct, and any amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 are available free of charge on its Web site as soon as reasonably practicable after the Company files such reports and amendments with, or furnishes them to, the Securities and Exchange Commission.

ITEM 2. PROPERTIES

Our facility consists of space for research and development, manufacturing, product support operations, marketing and corporate headquarters and administration. Our facility is located in Madison, Wisconsin. Our facility is leased and described by the following:

TYPE OF FACILITY	APPROX. SQUARE FOOTAGE	LEASE EXPIRATION
Headquarters, research and development, manufacturing, selling, marketing, and administration.....	95,000	September 2011, with option to extend for three 5-year periods.

Under the terms of the existing lease, we pay rent of approximately \$173,000 per month. We believe that our current facility will be adequate to meet our near-term space requirements and are currently seeking to sublease some of our existing corporate office space. We also believe that suitable additional space will be available to us, when needed, on commercially reasonable terms.

ITEM 3. LEGAL PROCEEDINGS

From time to time, we may be involved in litigation relating to claims arising out of our operations in the usual course of business. There are no material legal proceedings filed in which we are a defendant as of December 31, 2004.

In September 2004, we filed a patent infringement suit against Stratagene Corporation in Madison the U. S. District Court for the Western District of Wisconsin, located in Madison, Wisconsin. The complaint alleges that Stratagene is infringing certain claims of two of our patents. Trial is currently scheduled for August 2005.

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

None.

PART II

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

Our common stock is quoted on the NASDAQ National Market under the symbol "TWTI" and has been publicly traded since February 2001. The following table sets forth for each quarter in 2004 and 2003 the high and low sales prices per share, based on closing prices, for our common stock as reported on the NASDAQ National Market.

FISCAL YEAR ENDED DECEMBER 31, 2004	HIGH	LOW
First Quarter.....	\$ 4.82	\$ 3.37
Second Quarter.....	\$ 5.40	\$ 4.21
Third Quarter.....	\$ 6.88	\$ 3.19
Fourth Quarter.....	\$ 8.94	\$ 6.88

FISCAL YEAR ENDED DECEMBER 31, 2003	HIGH	LOW
First Quarter.....	\$ 3.70	\$ 2.64
Second Quarter.....	\$ 5.30	\$ 3.29
Third Quarter.....	\$ 4.65	\$ 3.13

Fourth Quarter..... \$ 4.75 \$ 3.25

As of March 10, 2005, approximately 345 shareholders of record held our common stock.

We have never declared or paid any dividends on our capital stock. We currently expect to retain future earnings, if any, to support the development of our business and do not anticipate paying any cash dividends in the foreseeable future.

ITEM 6. SELECTED FINANCIAL DATA

The following table summarizes certain selected financial data that is derived from the Company's audited financial statements. All the information should be read in conjunction with the Company's audited financial statements and notes thereto and with Management's Discussion and Analysis of Financial Condition and Results of Operations, which are included elsewhere in this Form 10-K. The Company's audited statements of operations for the years ended December 31, 2004, 2003, and 2002 and the audited balance sheets as of December 31, 2004 and 2003 are included elsewhere in this filing. The corresponding selected financial data set forth below should be read in conjunction with such audited financial statements.

	FOR YEAR ENDED DECEMBER 31, (IN THOUSANDS, EXCEPT FOR PER SHARE AMOUNTS)				
	2004	2003	2002	2001	2000
STATEMENT OF OPERATIONS DATA:					
Revenues	\$ 46,493	\$ 36,320	\$ 32,355	\$ 34,092	\$ 11,417
Operating expenses:					
Cost of goods sold	12,492	12,840	21,320	32,746	11,518
Research and development	11,637	12,035	13,934	16,179	7,337
Selling and marketing	10,803	8,859	9,578	9,200	4,983
General and administrative	13,262	10,363	11,984	14,521	7,408
Restructuring and other charges	(98)	-	11,087	-	-
Impairment of goodwill and other intangible assets	-	-	4,810	-	5,789
Impairment of equipment	795	-	-	-	-
Merger costs	-	-	-	-	833
Total operating expenses	48,891	44,097	72,713	72,646	37,868
Loss from operations	(2,398)	(7,777)	(40,358)	(38,554)	(26,451)
Other income (expense), net	513	(339)	(506)	1,762	877
Loss before income taxes	(1,885)	(8,116)	(40,864)	(36,792)	(25,574)
Provision for income taxes	57	-	-	-	-
Net loss	(1,942)	(8,116)	(40,864)	(36,792)	(25,574)
Deemed dividend upon issuance of convertible preferred stock	-	-	-	-	(17,023)
Net loss attributable to common shareholders	\$ (1,942)	\$ (8,116)	\$ (40,864)	\$ (36,792)	\$ (42,597)
Basic and diluted net loss per share	\$ (0.05)	\$ (0.20)	\$ (1.04)	\$ (1.03)	\$ (2.83)
Shares used in computing basic and diluted net loss per share	40,463	39,749	39,457	35,714	15,078
Pro forma basic and diluted net loss per share (a)				\$ (0.98)	\$ (0.98)
Shares used in computing pro forma basic and diluted net loss per share				37,483	26,120

	DECEMBER 31, (IN THOUSANDS)				
	2004	2003	2002	2001	2000
BALANCE SHEET DATA:					
Cash, cash equivalents, and short term investments	\$ 66,690	\$ 57,816	\$ 60,315	\$ 73,299	\$ 47,179
Working capital	52,901	42,655	43,518	64,834	29,122
Total assets	88,068	80,422	89,223	131,615	83,193
Long-term obligations, net of current portion	487	13	13	6,694	12,095
Accumulated deficit	(135,774)	(133,832)	(125,715)	(84,852)	(48,149)
Total shareholders' equity	62,735	59,288	65,287	104,753	47,039

(a) Pro forma basic and diluted net loss per common share for 2001 and 2000 gives effect to common stock equivalent shares arising, assuming that the preferred stock and convertible note payable were converted to common stock upon issuance using the "if converted" method. This pro forma disclosure has been included because the preferred stock and convertible note payable automatically converted to common stock upon closing of our initial public offering in February 2001.

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

This Management's Discussion and Analysis of Financial Condition and Results of Operations should be read in conjunction with "Selected Financial Data" and our financial statements, including the notes thereto, included elsewhere in this Form 10-K.

OVERVIEW

Third Wave Technologies, Inc. is a leading molecular diagnostics company. We believe our proprietary Invader(R) chemistry, a novel, proprietary molecular chemistry, is easier to use, more accurate and cost-effective, and enables higher testing throughput. These and other advantages conferred by our chemistry are enabling us to provide clinicians and researchers with superior molecular solutions.

More than 110 clinical laboratory customers are using Third Wave's molecular diagnostic reagents. Other customers include pharmaceutical and biotechnology companies, academic research centers and major health care providers.

Third Wave markets a growing number of products, including analyte specific reagents (ASRs). These ASRs allow certified clinical reference laboratories to create assays to perform hepatitis C virus genotyping, to screen for cystic fibrosis and other inherited disorders, and to test for the Factor V Leiden and a host of other mutations associated with predisposition to cardiovascular and other diseases. The Company has developed or plans to develop a menu of molecular diagnostic products for clinical applications that include genetic testing, pharmacogenetics, oncology/chromosomal analysis, and infectious disease/women's health. The Company also has a number of other Invader(R) products including those for research, agricultural and other applications.

Our financial results may vary significantly from quarter to quarter due to fluctuations in the demand for our products, timing of new product introductions and deliveries made during the quarter, the timing of research, development and grant revenues, and increases in spending, including expenses related to our product development.

CRITICAL ACCOUNTING POLICIES

Management's discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. We review the accounting policies we use in reporting our financial results on a regular basis. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate our estimates, including those related to accounts receivable, inventories, equipment and leasehold improvements and intangible assets. We base our estimates on historical 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 value of assets and liabilities that are not readily apparent from other sources. Results may differ from these estimates due to actual outcomes being different from those on which we based our assumptions. These estimates and judgments are reviewed by management on an ongoing basis, and by the Audit Committee at the end of each quarter prior to the public release of our financial results. We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our consolidated financial statements.

RESTRUCTURING AND OTHER CHARGES

The restructuring and other charges resulting from the restructuring plan in the third quarter of 2002 was recorded in accordance with Emerging Issues Task Force ("EITF") Issue No. 94-3, "Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring)," Staff Accounting Bulletin No. 100, "Restructuring and Impairment Charges," and Financial Accounting Standards Board ("FASB") Statement No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets." The restructuring charge was comprised primarily of costs to consolidate facilities, impairment charges for abandoned leasehold improvements and equipment to be sold or abandoned, prepayment penalties related mainly to capital lease obligations on equipment to be sold or abandoned, and other costs related to the restructuring. In calculating the cost to consolidate the facilities, we estimated the future lease and operating costs to be paid until the leases are terminated and the amount, if any, of sublease receipts for each location. This required us to estimate the timing and costs of each lease to be terminated, the amount of operating costs, and the timing and rate at which we might be able to sublease the site. To form our estimates for these costs, we performed an assessment of the affected facilities and considered the current market conditions for each site. Estimates were also used in our calculation of the estimated realizable value on equipment that was held for sale. These estimates were formed based on recent history of sales of similar equipment and market conditions. Our assumptions on the lease termination payments, operating costs until terminated, and the offsetting sublease receipts may turn out to be incorrect and our actual cost may be materially different from our estimates.

LONG-LIVED ASSETS -- IMPAIRMENT

Equipment, leasehold improvements and amortizable identifiable intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. For assets held and used, if the sum of the expected undiscounted cash flows is less than the carrying value of the related asset or group of assets, a loss is recognized for the difference between the fair value and carrying value of the asset or group of assets. For assets removed from service and held for sale, we estimate the fair market value of such assets and record an adjustment if fair value less costs to sell is lower than carrying value.

Goodwill and intangible assets deemed to have indefinite lives are not amortized, but are subject to annual impairment tests under Statement of Financial Accounting Standards No. 142, "Goodwill and Other Intangible Assets." The annual impairment test was completed in the quarters ended September 2004, 2003, and 2002.

DERIVATIVE INSTRUMENTS

We sell products in a number of countries throughout the world. During 2004, 2003 and 2002, we sold certain products with the resulting accounts receivable denominated in Japanese Yen. We purchased foreign currency forward contracts to manage the risk associated with collections of receivables denominated in foreign currencies in the normal course of business. These derivative instruments have maturities of less than one year and are intended to offset the effect of transaction gains and losses. There were no contracts outstanding at December 31, 2004. Contracts outstanding at December 31, 2003 represented a combined U.S. dollar equivalent commitment of approximately \$9.5 million. The changes in the fair value of the derivatives and the loss or gain on the hedged asset relating to the risk being hedged are recorded currently in earnings.

INVENTORIES -- SLOW MOVING AND OBSOLESCENCE

Significant management judgment is required to determine the reserve for obsolete or excess inventory. Inventory on hand may exceed future demand either because of process improvements or technology advancements, the amount on hand is more than can be used to meet future need, or estimates of shelf lives may change. We currently consider all inventory that we expect will have no activity within one year as well as any additional specifically identified inventory to be subject to a provision for excess inventory. We also provide for the total value of inventories that we determine to be obsolete based on criteria such as changing manufacturing processes and technologies. At December 31, 2004, our inventory reserves were \$650,000, or 34% of our \$1.9 million total gross inventories.

RESULTS OF OPERATIONS

YEARS ENDED DECEMBER 31, 2004 AND 2003

Revenues. Revenues for the year ended December 31, 2004 of \$46.5 million represented an increase of \$10.2 million as compared to revenues of \$36.3 million for the year ended December 31, 2003.

Product revenues increased to \$46.0 million for the year ended December 31, 2004, from \$35.1 million in the year ended December 31, 2003. The increase in product sales during 2004 resulted from an increase in U.S. molecular diagnostic sales and higher genomic research product sales to a Japanese research institute for use by several end users compared to prior year. We expect our molecular diagnostic revenues to increase in 2005.

There were no development revenues in the year ended December 31, 2004, compared to \$0.9 million for the year ended December 31, 2003. The decrease was due to the transition from development revenue to product revenue in our development and commercialization agreement with BML, Inc. (BML). Under the agreement, we develop assays in accordance with a mutually agreed development program for use in clinical applications by BML.

License and royalty revenue was \$0.2 million in the years ended December 31, 2004 and 2003. In the years ended December 31, 2004 and 2003, we received royalty revenue of \$150,000 and \$100,000 respectively, from Aclara, per the license and supply agreement.

Significant Customer. We generated \$27.6 million, or 59% of our revenues, from sales to a major Japanese research institute for use by several end-users during the year ended December 31, 2004. As of December 31, 2004, \$2.1 million of our accounts receivable were attributable to this customer. This customer will continue to purchase our products in 2005; however, the timing and total of such purchases will be influenced by the funding process and amounts which are unpredictable and unknown to us.

Cost of Goods Sold. Cost of goods sold consists of materials used in the manufacture of product, depreciation on manufacturing capital equipment, salaries and related expenses for management and personnel associated with our manufacturing and quality control departments and amortization of licenses and settlement fees. For the year ended December 31, 2004, cost of goods sold decreased to \$12.5 million, compared to \$12.8 million for the year ended December 31, 2003. The decrease was due to improved efficiencies. We expect gross margin to improve as clinical revenues increase.

Research and Development Expenses. Our research activities are focused on moving our technology into broader markets. Our development activities are focused on new products to expand our molecular diagnostics menu. Research and development expenses consist primarily of salaries and related personnel costs, material costs for assays and product development, fees paid to consultants, depreciation and facilities costs and other expenses related to the design, development, testing and enhancement of our products and acquisition of technologies used or to be used in our products. Research and development costs are expensed as they are incurred. Research and development expenses for the year ended December 31, 2004 were \$11.6 million, compared to \$12.0 million for the year ended December 31, 2003. The decrease in research and development expenses was primarily attributable to decreased material costs for assay and product development and a decrease in personnel related expenses. We will continue to invest in research and development, and expenditures in this area may increase as we expand our product development efforts.

Selling and Marketing Expenses. Selling and marketing expenses consist primarily of salaries and related personnel costs for our sales and marketing management and field sales force, commissions, office support and related costs, and travel and entertainment. Selling and marketing expenses for the year ended December 31, 2004 were \$10.8 million, an increase of \$1.9 million, as compared to \$8.9 million for the year ended December 31, 2003. The increase was attributable to an increase in personnel related expenses. We anticipate selling and marketing expenses to be at or above 2004 levels.

General and Administrative Expenses. General and administrative expenses consist primarily of salaries and related expenses for executive, finance and other administrative personnel, legal and professional fees, office support and depreciation. General and administrative expenses increased to \$13.3 million for the year ended December 31, 2004, from \$10.4 million for the year ended December 31, 2003. The increase was due to an increase in personnel related expenses and professional and consulting fees in 2004 compared to 2003. We anticipate general and administrative expenses to be at or above 2004 levels.

Impairment Loss. In the year ended December 31, 2004, an impairment charge of \$0.8 million was recorded for equipment written down to fair value.

Restructuring. In the year ended December 31, 2004, a \$98,000 reduction to the restructuring reserve was recorded due to a change in assumptions. The estimate of the amount of sublease income expected was reduced. In addition, the estimated lease and operating expenses were also reduced, based on a portion of the office space being utilized.

Interest Income. Interest income for the year ended December 31, 2004 was \$0.8 million, compared to \$0.6 million for the year ended December 31, 2003. This increase was primarily due to higher interest rates and higher cash balances in 2004 compared to 2003.

Interest Expense. Interest expense for the years ended December 31, 2004 and 2003 was approximately \$0.3 million.

Provision for Income Taxes. Income tax expense for the year ended December 31, 2004 of \$57,000 was due to alternative minimum tax.

YEARS ENDED DECEMBER 31, 2003 AND 2002

Revenues. Revenues for the year ended December 31, 2003 of \$36.3 million represented an increase of \$3.9 million as compared to revenues of \$32.4 million for the year ended December 31, 2002.

Product revenues increased to \$35.1 million for the year ended December 31, 2003, from \$28.9 million in the year ended December 31, 2002. The increase in product sales during 2003 resulted from an increase in U.S. molecular diagnostic sales and higher genomic research product sales to the Japanese government compared to prior year.

Development revenues decreased to \$0.9 million for the year ended December 31, 2003, from \$1.6 million for the year ended December 31, 2002. The decrease was primarily due to a decrease in funding amounts per our development and commercialization

agreement with BML.

License and royalty revenue decreased to \$0.2 million in the year ended December 31, 2003, from \$1.5 million for 2002. The decrease was due to a decrease in license revenue from Aclara. In the year ended December 31, 2003, we received royalty revenue of \$0.1 million from Aclara, per the license and supply agreement, compared to revenue of \$1.5 million for the license granted to Aclara in the year ended December 31, 2002.

Significant Customer. We generated \$25.0 million, or 69% of our revenues, from sales to a major Japanese research institute for use by several end-users during the year ended December 31, 2003. As of December 31, 2003, \$1.0 million of our accounts receivable were attributable to this customer.

Cost of Goods Sold. Cost of goods sold consists of materials used in the manufacture of product, depreciation on manufacturing capital equipment, salaries and related expenses for management and personnel associated with our manufacturing and quality control departments and amortization of licenses and settlement fees. For the year ended December 31, 2003, cost of goods sold decreased to \$12.8 million, compared to \$21.3 million for the year ended December 31, 2002. The decrease was due to lower fixed costs as a result of the restructuring that occurred in the third quarter of 2002.

Research and Development Expenses. Our research activities are focused on moving our technology into broader markets. Our development activities are focused on new products to expand our molecular diagnostics menu. Research and development expenses consist primarily of salaries and related personnel costs, material costs for assays and product development, fees paid to consultants, depreciation and facilities costs and other expenses related to the design, development, testing and enhancement of our products and acquisition of technologies used or to be used in our products. Research and development costs are expensed as they are incurred. Research and development expenses for the year ended December 31, 2003 were \$12.0 million, compared to \$13.9 million for the year ended December 31, 2002. The decrease in research and development expenses was primarily attributable to decreased material costs for assay and product development and a decrease in fees paid for consulting, development, and other services.

Selling and Marketing Expenses. Selling and marketing expenses consist primarily of salaries and related personnel costs for our sales and marketing management and field sales force, commissions, office support and related costs, and travel and entertainment. Selling and marketing expenses for the year ended December 31, 2003 were \$8.9 million, a decrease of \$0.7 million, as compared to \$9.6 million for the year ended December 31, 2002. The decrease was attributable to a combination of a reduction in distributor commissions and consulting fees and an increase in personnel related expenses.

General and Administrative Expenses. General and administrative expenses consist primarily of salaries and related expenses for executive, finance and other administrative personnel, legal and professional fees, office support and depreciation. General and administrative expenses decreased to \$10.4 million for the year ended December 31, 2003, from \$12.0 million for the year ended December 31, 2002. The decrease was due to a decrease in personnel related expenses and consulting fees in 2003 compared to 2002.

Interest Income. Interest income for the year ended December 31, 2003 was \$0.6 million, compared to \$1.0 million for the year ended December 31, 2002. This decrease was primarily due to lower interest rates and lower cash balances in 2003 compared to 2002.

Interest Expense. Interest expense for the year ended December 31, 2003 was approximately \$0.3 million, compared to \$1.1 million in the year ended December 31, 2002. The decrease in interest expense was primarily due to lower interest rates on debt.

LIQUIDITY AND CAPITAL RESOURCES

Since our inception, we have financed our operations primarily through private placements of equity securities, research grants from federal and state government agencies, payments from strategic collaborators, equipment loans, capital leases, sale of products, a convertible note and an initial public offering. As of December 31, 2004, we had cash, cash equivalents and short-term investments of \$66.7 million.

Net cash provided by operations for the year ended December 31, 2004 was \$6.6 million, compared with net cash used of \$3.2 million in 2003 and \$14.0 million in 2002. The change was primarily due to lower operating losses.

Net cash used in investing activities for the year ended December 31, 2004 was \$0.8 million, compared to cash provided of \$0.2 million in 2003 and a cash usage of \$8.7 million in 2002. Capital expenditures were \$0.6 million in the year ended December 31, 2004, compared to \$0.2 million in 2003 and \$2.3 million in 2002. Investing activities included proceeds from the sale of equipment of less than \$0.1 million in the year ended December 31, 2004, \$0.3 million in the year ended December 31, 2003 and \$4.4 million in 2002. The proceeds from the sale of equipment in 2002 was primarily in connection with our restructuring. In the year ended December 31, 2004, the net cash usage from the purchases, sales and maturities of short-term investments was \$0.3 million, compared to net cash proceeds of \$0.2 million in 2003 and a net cash usage of \$10.8 million in 2002. In 2004, 2003 and 2002, we purchased certificates of deposit to collateralize our term loan with the bank.

Net cash provided by financing activities was \$2.8 million in the year ended December 31, 2004, compared to net cash provided by financing activities of \$0.7 million in the year ended December 31, 2003 and net cash used in financing activities of \$1.1 million in 2002. Cash used in financing activities in the year ended December 31, 2004 consisted of \$34,000 to repay debt, compared to \$15,000 in 2003 and \$6.6 million in 2002. Additionally, in 2004 and 2002, \$12,000 and \$4.4 million was used for capital lease obligation payments, respectively. In 2004 and 2002, cash provided by financing activities included proceeds from long-term debt of \$0.5 million and \$9.5 million, respectively. During 2002, we entered into a term loan agreement due on July 31, 2003 to pay off the then existing debt and capital lease obligations. Upon expiration in 2003 and 2004, we renewed the term loan for an additional year. The Company intends to renew this term loan obligation upon expiration in 2005. The term loan is collateralized with a 12-month certificate of deposit. Proceeds from the issuance of common stock were \$2.4 million in 2004, compared to \$0.7 million in 2003 and \$0.3 million in 2002.

As of December 31, 2004 and 2003, a valuation allowance equal to 100% of our net deferred tax assets had been recognized since future realization is not assured. At December 31, 2004, we had federal and state net operating loss carryforwards of approximately \$113 million. The net operating loss carryforwards will expire at various dates beginning in 2008, if not utilized. Utilization of the net operating losses to offset future taxable income may be subject to an annual limitation due to the change of ownership provisions of federal tax laws and similar state provisions as a result of the initial public offering in February 2001.

We cannot assure you that our business or operations will not change in a manner that would consume available resources more rapidly than anticipated. We also cannot assure you that we will not require substantial additional funding before we can achieve profitable operations. Our capital requirements depend on numerous factors, including the following:

- our progress with our research and development programs;
- our level of success in selling our products and technologies;
- our ability to establish and maintain successful collaborative relationships;
- the costs we incur in enforcing and defending our patent claims and other intellectual property rights; and
- the timing of purchases of additional capital.

CONTRACTUAL OBLIGATIONS

The following summarizes our contractual obligations at December 31, 2004 and the effect those obligations are expected to have on our liquidity and cash flow in future periods (in thousands):

	TOTAL	LESS THAN 1 YEAR	YEARS 2 - 3	YEARS 4 - 5	OVER 5 YEARS
	-----	-----	-----	-----	-----
CONTRACTUAL OBLIGATIONS					
Non-cancelable operating lease obligation	\$ 13,697	\$ 1,806	\$3,833	\$ 4,145	\$ 3,913
Capital lease obligations	268	76	128	55	9
Long-term debt	9,949	9,614	228	107	-
	-----	-----	-----	-----	-----
Total obligations	\$ 23,914	\$ 11,496	\$4,189	\$ 4,307	\$ 3,922
	-----	-----	-----	-----	-----

We also have an available and unused \$1.3 million letter of credit.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our exposure to market risk is currently confined to changes in foreign

exchange and interest rates. The securities in our investment portfolio are not leveraged and, due to their short-term nature, are subject to minimal interest rate risk. We currently do not

hedge interest rate exposure. Due to the short-term maturities of our investments, we do not believe that an increase in market rates would have any negative impact on the realized value of our investment portfolio.

To reduce foreign exchange risk, we selectively use financial instruments. Our earnings are affected by fluctuations in the value of the U.S. Dollar against foreign currencies as a result of the sales of our products in foreign markets. Forward foreign exchange contracts are used to hedge against the effects of such fluctuations. Our policy prohibits the trading of financial instruments for profit. A discussion of our accounting policies for derivative financial instruments is included in the notes to the financial statements.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

CONSOLIDATED FINANCIAL STATEMENTS

Third Wave Technologies, Inc.
Years ended December 31, 2004, 2003 and 2002

Third Wave Technologies, Inc.

Index to Consolidated Financial Statements

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of
Third Wave Technologies, Inc.

We have audited the accompanying consolidated balance sheets of Third Wave Technologies, Inc. (the Company) as of December 31, 2004 and 2003, and the related consolidated statements of operations, shareholders' equity and cash flows for each of the three years in the period ended December 31, 2004. Our audits also included the financial statement schedule listed in the index at

Item 15(a). These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (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 financial statements referred to above present fairly, in all material respects, the consolidated financial position of Third Wave Technologies, Inc. at December 31, 2004 and 2003, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2004, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of Third Wave Technologies, Inc.'s internal control over financial reporting as of December 31, 2004, based on criteria established in Internal Control--Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 4, 2005 expressed an unqualified opinion thereon.

Ernst & Young LLP

Milwaukee, Wisconsin
March 4, 2005

Third Wave Technologies, Inc.

Consolidated Balance Sheets

	DECEMBER 31	
	2004	2003
	-----	-----
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 55,619,981	\$ 47,015,746
Short-term investments	11,070,000	10,800,000
Accounts receivable, net of allowance for doubtful accounts of \$300,000 and \$140,000 in 2004 and 2003, respectively	5,784,679	2,061,054
Inventories	1,236,392	1,394,046
Prepaid expenses and other	260,316	485,680
	-----	-----
Total current assets	73,971,368	61,756,526
Equipment and leasehold improvements:		
Machinery and equipment	15,832,489	18,544,956
Leasehold improvements	2,277,604	2,099,104
	-----	-----
	18,110,093	20,644,060
Less accumulated depreciation	12,139,423	12,116,813
	-----	-----
	5,970,670	8,527,247
Assets held for sale	269,000	-
Amortizable intangible assets	4,146,372	5,651,124
Indefinite-lived intangible assets	1,007,411	1,007,411
Goodwill	489,873	489,873
Other assets	2,212,935	2,989,752
	-----	-----
Total assets	\$ 88,067,629	\$ 80,421,933
	=====	=====

	DECEMBER 31	
	2004	2003
	-----	-----
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 6,519,005	\$ 4,955,434
Accrued payroll and related liabilities	2,873,506	2,802,297
Other accrued liabilities	1,867,361	1,776,250
Deferred revenue	129,530	67,760
Long-term debt due within one year	9,614,127	9,500,000
Capital lease obligations due within one year	66,867	-
	-----	-----
Total current liabilities	21,070,396	19,101,741
Deferred revenue	254,434	-
Long-term debt	335,069	13,333
Capital lease obligations	151,885	-
Other liabilities	3,520,948	2,019,024
Commitments (Note 6)		
Shareholders' equity:		
Participating preferred stock, Series A, \$.001 par value, 100,000 shares authorized, 0 shares issued and outstanding	-	-
Common stock, \$.001 par value, 100,000,000 shares authorized, 41,102,764 and 40,021,244 shares issued and outstanding in 2004 and 2003, respectively	41,103	40,021
Additional paid-in capital	198,990,162	193,356,121
Unearned stock compensation	(554,293)	(309,996)
Foreign currency translation adjustment	31,949	33,307
Accumulated deficit	(135,774,024)	(133,831,618)
	-----	-----
Total shareholders' equity	62,734,897	59,287,835
	-----	-----
Total liabilities and shareholders' equity	\$ 88,067,629	\$ 80,421,933
	=====	=====

See accompanying notes.

Third Wave Technologies, Inc.
Consolidated Statements of Operations

	YEAR ENDED DECEMBER 31		
	2004	2003	2002
Revenues:			
Product sales	\$ 46,016,127	\$ 35,148,297	\$ 28,880,942
Development revenues	-	916,664	1,641,567
Grant revenues	242,032	61,098	332,453
License and royalty revenue	234,841	193,792	1,500,000
	46,493,000	36,319,851	32,354,962
Operating expenses:			
Cost of goods sold (including amortization of capitalized legal settlement costs and reacquired marketing and distribution rights of \$1,504,752, \$1,504,752 and \$1,930,557 in 2004, 2003 and 2002, respectively)	12,491,783	12,839,502	21,320,133
Research and development	11,636,620	12,035,375	13,933,864
Selling and marketing	10,803,381	8,858,678	9,577,122
General and administrative	13,262,373	10,363,139	11,984,104
Impairment of goodwill and other intangible assets	-	-	4,809,902
Impairment of equipment	794,716	-	-
Restructuring and other charges	(98,000)	-	11,087,233
	48,890,873	44,096,694	72,712,358
Total operating expenses	48,890,873	44,096,694	72,712,358
Loss from operations	(2,397,873)	(7,776,843)	(40,357,396)
Other income (expense):			
Interest income	776,295	571,282	1,006,231
Interest expense	(283,240)	(298,182)	(1,089,497)
Other	19,753	(612,493)	(423,003)
	512,808	(339,393)	(506,269)
Loss before income taxes	(1,885,065)	(8,116,236)	(40,863,665)
Provision for income taxes	57,341	-	-
Net loss	\$ (1,942,406)	\$ (8,116,236)	\$ (40,863,665)
Net loss per share - basic and diluted	\$ (0.05)	\$ (0.20)	\$ (1.04)

See accompanying notes.

Third Wave Technologies
Consolidated Statement of Shareholders' Equity

	Common Stock			Foreign Currency Translation Adjustment
	Par	Additional Paid in Capital	Unearned Stock Compensation	
Balance at December 31, 2001	\$39,374	\$191,426,698	\$ (1,861,566)	\$ -
Common stock issued for stock options and stock purchase plan - 185,560 shares	186	300,931	-	-
Unearned stock compensation	-	147,932	(147,932)	-
Amortization of unearned stock compensation	-	-	1,248,154	-
Reversal of unearned stock compensation related to terminated employees	-	(294,425)	143,098	-
Net loss and comprehensive loss	-	-	-	-
Balance at December 31, 2002	39,560	191,581,136	(618,246)	-
Common stock issued for stock options and stock purchase plan - 461,670 shares	461	721,568	-	-
Unearned stock compensation	-	1,162,477	(1,162,477)	-
Amortization of unearned stock compensation	-	-	1,374,377	-
Reversal of unearned stock compensation related to terminated employees	-	(109,060)	96,350	-
Net loss	-	-	-	-
Foreign currency translation adjustment	-	-	-	33,307
Comprehensive loss	-	-	-	-
Balance at December 31, 2003	40,021	193,356,121	(309,996)	33,307
Common stock issued for stock options and stock purchase plan - 1,081,520 shares	1,082	2,363,289	-	-
Unearned stock compensation	-	3,270,752	(3,270,752)	-
Amortization of unearned stock compensation	-	-	3,026,455	-
Net loss	-	-	-	-
Foreign currency translation adjustment	-	-	-	(1,358)
Comprehensive loss	-	-	-	-
Balance at December 31, 2004	\$41,103	\$198,990,162	\$ (554,293)	\$ 31,949

	Accumulated Deficit	Total
Balance at December 31, 2001	\$ (84,851,717)	\$104,752,789
Common stock issued for stock options and stock purchase plan - 185,560 shares	-	301,117
Unearned stock compensation	-	-
Amortization of unearned stock compensation	-	1,248,154
Reversal of unearned stock compensation related to terminated employees	-	(151,327)
Net loss and comprehensive loss	(40,863,665)	(40,863,665)
Balance at December 31, 2002	(125,715,382)	65,287,068
Common stock issued for stock options and stock purchase plan - 461,670 shares	-	722,029
Unearned stock compensation	-	-
Amortization of unearned stock compensation	-	1,374,377
Reversal of unearned stock compensation related to terminated employees	-	(12,710)
Net loss	(8,116,236)	(8,116,236)
Foreign currency translation adjustment	-	33,307
Comprehensive loss	-	(8,082,929)
Balance at December 31, 2003	(133,831,618)	59,287,835
Common stock issued for stock options and stock purchase plan - 1,081,520 shares	-	2,364,371
Unearned stock compensation	-	-
Amortization of unearned stock compensation	-	3,026,455
Net loss	(1,942,406)	(1,942,406)
Foreign currency translation adjustment	-	(1,358)
Comprehensive loss	-	(1,943,764)
Balance at December 31, 2004	\$ (135,774,024)	\$ 62,734,897

Third Wave Technologies, Inc.

Consolidated Statements of Cash Flows

	2004	YEAR ENDED DECEMBER 31 2003	2002
	-----	-----	-----
OPERATING ACTIVITIES			
Net loss	\$ (1,942,406)	\$ (8,116,236)	\$ (40,863,665)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Depreciation	2,107,466	2,607,096	7,100,496
Amortization of intangible assets	1,504,752	1,504,752	1,968,558
Amortization of licensed technology	623,956	480,633	415,017
Noncash stock compensation	3,026,455	1,361,667	1,096,827
Noncash charge for impairment and restructuring	-	-	12,151,817
Impairment charge and (gain) loss on disposal of equipment	888,817	(410)	(68,898)
Amortization of deferred gain	-	-	(23,871)
Change in operating assets and liabilities:			
Receivables	(3,724,983)	697,109	(895,734)
Inventories	157,654	266,298	4,788,630
Prepaid expenses and other assets	390,645	809,031	1,554,514
Accounts payable	1,563,571	(2,133,528)	(4,187,993)
Accrued expenses and other liabilities	1,664,244	224,512	4,498,178
Deferred revenue	316,204	(877,904)	(1,506,954)
Net cash provided by (used in) operating activities	6,576,375	(3,176,980)	(13,973,078)
INVESTING ACTIVITIES			
Purchases of equipment and leasehold improvements	(578,472)	(249,916)	(2,277,114)
Proceeds on sale of equipment	88,320	321,264	4,391,389
Purchases of licensed technology	-	(100,000)	-
Purchases of short-term investments	(11,070,000)	(10,800,000)	(10,941,000)
Sales and maturities of short-term investments	10,800,000	11,013,000	96,000
Net cash provided by (used in) investing activities	(760,152)	184,348	(8,730,725)
FINANCING ACTIVITIES			
Proceeds from long-term debt	470,000	-	9,500,000
Payments on long-term debt	(34,137)	(15,152)	(6,556,494)
Proceeds from issuance of common stock, net	2,364,371	722,029	301,117
Payments on capital lease obligations	(12,222)	-	(4,370,442)
Net cash provided by (used in) financing activities	2,788,012	706,877	(1,125,819)
Increase (decrease) in cash and cash equivalents	8,604,235	(2,285,755)	(23,829,622)
Cash and cash equivalents at beginning of year	47,015,746	49,301,501	73,131,123
Cash and cash equivalents at end of year	\$ 55,619,981	\$ 47,015,746	\$ 49,301,501
Supplemental disclosure of cash flows information-			
Cash paid for interest	\$ 277,226	\$ 301,817	\$ 1,075,940

Noncash investing and financing activities:

During the year ended December 31, 2004, the Company entered into capital lease obligations of \$230,974.

See accompanying notes.

Third Wave Technologies, Inc.

Notes to Consolidated Financial Statements

December 31, 2004

1. NATURE OF OPERATIONS AND PRINCIPLES OF CONSOLIDATION

PRINCIPLES OF CONSOLIDATION

The accompanying consolidated financial statements include the accounts of Third Wave Technologies, Inc. (the Company) and its wholly owned subsidiaries, Third Wave-Japan KK and Third Wave Agbio, Inc. (Agbio). All significant intercompany balances and transactions are eliminated in consolidation.

NATURE OF OPERATIONS

The Company is a leading molecular diagnostics company. The Company believes its proprietary Invader(R) technology platform is easier to use, more accurate and cost-effective, and enables higher testing throughput than conventional methods. These and other advantages conferred by the Company's technology platform are enabling the Company to provide physicians and researchers with superior molecular solutions for the analysis and treatment of disease.

The Company currently markets products domestically and internationally to clinical and research markets using an internal sales force as well as collaborative relationships with pharmaceutical companies and research institutions. Revenues to a major Japanese research institute for use by several end users during 2004, 2003 and 2002 were 59%, 69% and 51% of total revenues, respectively. The Company performs periodic credit evaluations of its customers' financial condition and generally does not require collateral. The Company evaluates the collectibility of its accounts receivable based on a combination of factors. For accounts greater than 60 days past due, an allowance for doubtful accounts is recorded based on a customer's ability and likelihood to pay based on management's review of the facts. For all other accounts, the Company recognizes an allowance based on the length of time the receivable is past due and the anticipated future write offs based on historical experience.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A summary of the significant accounting policies applied in the preparation of the accompanying financial statements follows.

CASH EQUIVALENTS AND SHORT-TERM INVESTMENTS

The Company considers highly liquid money market investments and short-term investments with maturities of 90 days or less from the date of purchase to be cash equivalents.

Short-term investments consist of certificates of deposit with maturities less than one year. The cost of these securities, which are considered "available-for-sale" for financial reporting purposes, approximates fair value at December 31, 2004 and 2003.

INVENTORIES

Inventories are carried at the lower of cost or market using the first-in, first-out method for determining cost and consist of the following:

	DECEMBER 31	
	2004	2003
	-----	-----
Raw material	\$ 1,318,771	\$ 1,609,866
Finished goods and work in process	567,621	534,180
Reserve for excess and obsolete inventory	(650,000)	(750,000)
	-----	-----
Total inventories	\$ 1,236,392	\$ 1,394,046
	=====	=====

ADVERTISING COSTS

Advertising costs are expensed as incurred. Advertising costs were \$85,069, \$165,854 and \$511,685 in 2004, 2003 and 2002, respectively.

FOREIGN CURRENCY TRANSLATION

The Company's Japanese subsidiary uses the local currency as its functional currency. Accordingly, assets and liabilities are translated into U.S. dollars at year-end exchange rates, and revenues and expenses are translated at weighted-average exchange rates. The resulting translation adjustment is recorded as a separate component of shareholders' equity.

EQUIPMENT AND LEASEHOLD IMPROVEMENTS

Equipment and leasehold improvements are recorded at cost less accumulated depreciation. Depreciation of purchased equipment is computed by the straight-line method over the estimated useful lives of the assets which are generally three to ten years. Depreciation of leasehold improvements and leased equipment is computed by the straight-line method over the shorter of the estimated useful lives of the assets or the remaining lease term.

PATENTS

Patent-related development costs are expensed in the period incurred and are included in general and administrative expenses in the statements of operations. These costs were \$844,110, \$780,959 and \$509,598 in 2004, 2003 and 2002, respectively.

GOODWILL AND OTHER INTANGIBLE ASSETS

Under Statement of Financial Accounting Standards (SFAS) No. 142, "Goodwill and Other Intangible Assets" goodwill and intangible assets deemed to have indefinite lives are no longer amortized, but are subject to annual impairment tests. Remaining intangible assets at December 31, 2004, 2003 and 2002 consist primarily of costs of settling patent litigation, which are amortized over their estimated useful life of seven years.

In connection with the adoption of SFAS No. 142, on January 1, 2002 the Company completed the first step of the transitional impairment test of goodwill. Based on this analysis, the Company concluded that no impairment existed at the time of adoption, and accordingly, the Company did not recognize any transitional impairment loss for goodwill. For intangible assets with indefinite lives, the fair values of these assets were compared to their carrying values as of January 1, 2002, also resulting in no transitional impairment.

The Company completed its annual impairment tests in the third quarter of 2002, 2003, and 2004. In addition, an interim impairment test was performed in the second quarter of 2004 due to a change in the Company's forecast. For goodwill, this analysis is based on the comparison of the fair value of its reporting units to the carrying value of the net assets of the respective reporting units. The fair value of the reporting units was determined using a combination of discounted cash flows method and other common valuation methodologies. For intangible assets with indefinite lives, the fair values of these assets determined using the income based approach were compared to their carrying values.

Based on the analyses, in 2002 the Company determined that goodwill and intangible assets deemed to have indefinite lives were impaired and accordingly, recognized an impairment charge of \$4,676,902 (Goodwill - \$4,210,313, Indefinite-lived intangible assets - \$466,589). In addition, in 2002, the Company recognized an impairment charge related to its customer agreements of \$133,000. The Company concluded that no impairment existed at the time of the annual impairment test in 2003 and 2004 or at the time of the additional impairment test in the second quarter of 2004.

Identifiable intangible assets with indefinite lives consist of the following at December 31, 2004 and 2003:

Technology license	\$	915,828
Trademark		91,583

	\$	1,007,411
		=====

Amortizable intangible assets consist of the following:

	DECEMBER 31, 2004		DECEMBER 31, 2003	
	CARRYING AMOUNT	GROSS ACCUMULATED AMORTIZATION	CARRYING AMOUNT	GROSS ACCUMULATED AMORTIZATION
Costs of settling patent litigation	\$ 10,533,248	\$ 6,386,876	\$ 10,533,248	\$ 4,882,124
Reacquired marketing and distribution rights	2,211,111	2,211,111	2,211,111	2,211,111
Customer agreements	38,000	38,000	38,000	38,000
	\$ 12,782,359	\$ 8,635,987	\$ 12,782,359	\$ 7,131,235

The estimated future amortization expense related to intangible assets for the years subsequent to December 31, 2004 is as follows:

2005	\$1,504,752
2006	1,504,752
2007	1,136,868

IMPAIRMENT OF LONG-LIVED ASSETS

Equipment, leasehold improvements and amortizable identifiable intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. If the sum of the expected undiscounted cash flows is less than the carrying value of the related asset or group of assets, a loss is recognized for the difference between the fair value and carrying value of the asset or group of assets. Such analyses necessarily involve significant judgment. During 2004, the Company recorded a charge of \$795,000 to write down certain equipment to its fair value. During 2002, the Company recorded a charge of approximately \$7,176,000 associated with its restructuring activities (described further in Note 7) to write-off leasehold improvements related to vacated leased facilities and to write down certain equipment to its fair value.

PREPAID LICENSE FEES

Other assets at December 31, 2004 and 2003 include \$1,223,005 and \$1,846,961, respectively, of prepaid license fees (which is net of \$2,072,033 and \$1,448,077, respectively, of accumulated amortization) paid to third parties for the use of patented technology. The assets are being amortized to expense over the shorter of the term of the license or the estimated useful lives of the assets (generally three to ten years).

DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES

The Company sells its products in a number of countries throughout the world. During 2004, 2003 and 2002, the Company sold certain products with the resulting accounts receivable denominated in Japanese Yen. The Company purchases foreign currency forward contracts to manage the risk associated with collections of receivables denominated in foreign currencies in the normal course of business. These derivative instruments have maturities of less than one year and are intended to offset the effect of currency gains and losses on the underlying Yen receivables. There were no contracts outstanding at December 31, 2004. Forward contracts outstanding at December 31, 2003, represented a U.S. dollar equivalent commitment of approximately \$9,500,000. The negative fair value of these derivative instruments of approximately \$631,000 at December 31, 2003 is included in accrued liabilities in the accompanying balance sheets. The changes in the fair value of the Company's derivatives and the loss or gain on the hedged asset relating to the risk being hedged both are recorded currently in operations. Aggregate losses (gains) from foreign currency transactions were approximately (\$71,000), \$708,000, and \$117,000 in 2004, 2003 and 2002, respectively.

REVENUE RECOGNITION

Revenue from product sales is recognized upon delivery which is generally when the title passes to the customer, provided that the Company has completed all performance obligations and the customer has accepted the products. Customers have no contractual rights of return or refunds associated with product sales.

Grant and development revenues consist primarily of research grants from agencies of the federal government and revenue from companies with which the Company has established strategic alliances, the revenue from which is recognized as research is performed. Payments received which are related to future performance are deferred and recorded as revenue when earned. Grant payments designated to purchase specific assets to be used in the performance of a contract are recognized as revenue over the shorter of the useful life of the asset acquired or the contract.

License and royalty revenue includes amounts earned from third parties for licenses of the Company's intellectual property and are recognized when earned under the terms of the related agreements. License revenues are generally recognized upon receipt unless the Company has continuing performance obligations, in which case the license revenue is recognized ratably over the period of expected performance. Consideration received in multiple element arrangements is allocated to the separate units based upon their relative fair values. Royalty revenues are recognized under the terms of the related agreements, generally upon manufacture or shipment of a product by a licensee.

RESEARCH AND DEVELOPMENT

All costs for research and development activities are expensed in the period incurred.

SHIPPING AND HANDLING COSTS

Shipping and handling costs incurred are classified as cost of goods sold in the accompanying statements of operations.

INCOME TAXES

Deferred income taxes are recognized for the tax consequences in future years of differences between the tax bases of assets and liabilities and their financial reporting amounts at each year-end based on enacted tax laws and statutory tax rates applicable to the periods in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized. Income tax expense is the current tax payable for the period plus or minus the change during the period in deferred tax assets and liabilities. Prior to 2004, no current or deferred income taxes have been provided because of the net operating losses incurred by the Company since its inception (see Note 5).

STOCK-BASED COMPENSATION

The Company has stock-based employee compensation plans (see Note 4). SFAS No. 123, "Accounting for Stock-Based Compensation," encourages, but does not require companies to record compensation cost for stock-based employee compensation plans at fair value. The Company has chosen to continue using the intrinsic value method prescribed in Accounting Principles Board (APB) Opinion No. 25, "Accounting for Stock Issued to Employees," and related interpretations, in accounting for its stock option plans.

Had compensation cost been determined based upon the fair value method prescribed by SFAS No. 123 at the grant date for awards under the plans, the Company's SFAS No. 123 pro forma net loss and net loss per share would have been as follows:

	2004	YEAR ENDED DECEMBER 31 2003	2002
	-----	-----	-----
Net loss:			
As reported	\$ (1,942,406)	\$ (8,116,236)	\$ (40,863,665)
Less: Stock-based compensation, as recognized	3,026,455	1,361,667	1,096,827
Add: Stock-based compensation expense related to stock options determined under SFAS No. 123	(4,347,817)	(4,216,913)	(3,373,035)
Add: Stock-based compensation related to the employee stock purchase plan determined under SFAS No. 123	(283,898)	(172,571)	(43,314)
SFAS No. 123 Pro forma	\$ (3,547,666)	\$ (11,144,053)	\$ (43,183,187)
	=====	=====	=====
Net loss per share:			
As reported, basic and diluted	\$ (0.05)	\$ (0.20)	\$ (1.04)
SFAS No. 123 pro forma, basic and diluted	\$ (0.09)	\$ (0.28)	\$ (1.09)

Stock compensation expense for options granted to nonemployees has been determined in accordance with SFAS No. 123 and Emerging Issues Task Force (EITF) Issue No. 96-18, "Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services," and represents the fair value of the consideration received or the fair value of the equity instruments issued, whichever may be more reliably measured. For options that vest over future periods, the fair value of options granted to nonemployees is periodically remeasured as the underlying options vest.

FAIR VALUE OF FINANCIAL INSTRUMENTS

The carrying amounts of the Company's financial instruments, which include cash and cash equivalents, short-term investments, accounts receivable, foreign currency forward contracts, accounts payable and long-term debt are considered to approximate their respective fair values.

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 amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

NET LOSS PER SHARE

Basic and diluted net loss per share has been computed using the weighted-average number of shares of common stock outstanding during the respective periods. The effect of stock options is antidilutive for all periods presented due to the existence of net losses.

The following table presents the calculation of basic and diluted net loss per share.

	YEAR ENDED DECEMBER 31		
	2004	2003	2002
Net loss	\$ (1,942,406)	\$ (8,116,236)	\$ (40,863,665)
Weighted-average shares of common stock outstanding - basic and diluted	40,463,000	39,749,000	39,457,000
Basic and diluted net loss per share	\$ (0.05)	\$ (0.20)	\$ (1.04)
Weighted-average shares from options that could potentially dilute basic earnings per share in the future that are not included in the computation of diluted loss per share as their impact is antidilutive (computed under the treasury stock method)	2,091,000	1,213,000	506,000

NEW ACCOUNTING PRONOUNCEMENTS

On December 16, 2004, the Financial Accounting Standards Board (FASB) issued SFAS No. 123 (revised 2004), "Share-Based Payment," which is a revision of SFAS No. 123. SFAS No. 123(R) supersedes APB Opinion No. 25 and amends SFAS No. 95, "Statement of Cash Flows." Generally, the approach in SFAS No. 123(R) is similar to the approach described in SFAS No. 123. However, SFAS No. 123(R) requires all share-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values. Pro forma disclosure is no longer an alternative.

SFAS No. 123(R) must be adopted no later than July 1, 2005. Early adoption will be permitted in periods in which financial statements have not yet been issued. The Company expects to adopt SFAS No. 123(R) on July 1, 2005. SFAS No. 123(R) permits public companies to adopt its requirements using one of two methods: (1) a "modified prospective" method in which compensation cost is recognized beginning with the effective date (a) based on the requirements of SFAS No. 123(R) for all-share based payments granted after the effective date and (b) based on the requirements of SFAS No. 123 for all awards granted to employees prior to the effective date of SFAS No. 123(R) that remain unvested on the effective date; or (2) a "modified retrospective" method which includes the requirements of the modified prospective method described above, but also permits entities to restate based on the amounts previously recognized under SFAS No. 123 for purposes of pro forma disclosures either (a) all prior periods presented or (b) prior interim periods of the year of adoption. The Company has not yet determined which method it will adopt.

As permitted by SFAS No. 123, the Company currently accounts for share-based payments to employees using APB Opinion No. 25's intrinsic value method and, as such, generally recognizes no compensation cost for employee stock options when granted as the number of shares is fixed and the exercise price of the stock options equals the market price of the underlying stock on the date of grant. Accordingly, the adoption of SFAS No. 123(R)'s fair value method will have a significant impact on the Company's results of operations, although it will have no impact on the Company's overall financial position. The impact of adoption of SFAS No. 123(R) cannot be predicted at this time because it will depend on levels of share-based payments granted in the future. However, had the Company adopted SFAS No. 123(R) in prior periods, the impact of that standard would have approximated the impact of SFAS No. 123 as described in the disclosure of pro forma net loss and net loss per share earlier in this note. SFAS No. 123(R) also requires the benefits of tax deductions in excess of recognized compensation cost to be reported as a financing cash flow, rather than as an operating cash flow as required under current literature.

3. LONG-TERM DEBT

Long-term debt is as follows:

	DECEMBER 31	
	2004	2003
Notes payable	\$ 9,935,863	\$ 9,500,000
Other	13,333	13,333
	-----	-----
	9,949,196	9,513,333
Less current portion	9,614,127	9,500,000
	-----	-----
	\$ 335,069	\$ 13,333
	=====	=====

Future long-term debt payments by year are as follows:

2005	\$9,614,127
2006	132,878
2007	95,305
2008	57,110
2009	49,776

The Company has a \$9,500,000 note payable with a bank due on August 14, 2005, bearing annual interest at 3.36%. The Company also entered into two additional notes payable in the original amounts of \$200,000 and \$270,000. The notes have a final maturity date of July 1, 2007 and October 1, 2009, bear annual interest at 4.25% and 4.93%, respectively, and require monthly principal and interest payments. The borrowings under the notes payable are secured by short-term investments consisting of certificates of deposit, of \$9,770,000. The Company has an available and unused \$1,300,000 letter of credit with the same bank that expires on September 1, 2005.

4. SHAREHOLDERS' EQUITY

The Board of Directors has authorized a program for the repurchase by the Company of up to 5% of its outstanding common stock. As of December 31, 2004, no shares of common stock have been repurchased.

STOCK PURCHASE PLAN

The Company has an Employee Stock Purchase Plan (Purchase Plan) under which an aggregate of 1,256,800 common shares may be issued. The Purchase Plan also provides for annual increases in the number of shares available for issuance, beginning in 2001, equal to the lesser of 1% of the outstanding shares of common stock on the first day of the fiscal year, 428,400 shares or an amount determined by the Board of Directors. During 2004, 400,000 additional shares were authorized for issuance under the plan. During 2004, 2003 and 2002, 306,211, 254,421 and 122,423 shares, respectively, were issued. Employees are eligible to participate in the Purchase Plan if they work at least 20 hours per week and more than five months in any calendar year. Eligible employees may make contributions through payroll deductions of up to 10% of their compensation. The price of common stock purchased under the Purchase Plan is 85% of the lower of the fair market value of the common stock at the beginning or end of the offering period. The Plan is considered noncompensatory under APB Opinion No. 25 and, therefore, no expense is recorded for the 15% discount.

STOCK OPTION PLANS

The Company has Incentive Stock Option Plans for its employees and Nonqualified Stock Option Plans (the Plans) for employees and non-employees under which an aggregate of 11,413,183 options may be granted. Annual increases in the number of shares available for issuance are allowed beginning in 2001, limited to the lesser of 4.5% of the outstanding shares of common stock on the first day of the fiscal year, 2,571,600 shares or an amount determined by the Board of Directors. During 2004 and 2002, 1,500,000 and 1,771,831 additional shares, respectively, were authorized for grant. There were no additional shares authorized for grant in 2003. Options under the Plans have a maximum life of ten years. Options vest at various intervals, as determined by the Board of Directors at the date of grant.

The rollforward of shares available for grant through December 31, 2004, is as follows:

Shares available for grant at December 31, 2001	2,670,631
Options granted	(2,307,950)
Options forfeited	1,064,075
Increase in options available for grant	1,771,831

Shares available for grant at December 31, 2002	3,198,587
Options granted	(2,813,300)
Options forfeited	1,093,405

Shares available for grant at December 31, 2003	1,478,692
Options granted	(2,127,255)
Options forfeited	1,161,928
Increase in options available for grant	1,500,000

Shares available for grant at December 31, 2004	2,013,365
	=====

The Company's option activity is as follows:

	NUMBER OF SHARES	WEIGHTED-AVERAGE EXERCISE PRICE
	-----	-----
Outstanding at December 31, 2001	4,563,121	6.85
Granted	2,307,950	2.31
Exercised	(63,137)	0.84
Forfeited	(1,064,075)	5.63
	-----	-----
Outstanding at December 31, 2002	5,743,859	5.29
Granted	2,813,300	3.42
Exercised	(207,249)	1.75
Forfeited	(1,093,405)	7.32
	-----	-----
Outstanding at December 31, 2003	7,256,505	4.37
Granted	2,127,255	4.97
Exercised	(775,309)	2.42
Forfeited	(1,161,928)	5.57
	-----	-----
Outstanding at December 31, 2004	7,446,523	4.55
	-----	-----
Exercisable at December 31, 2004	3,022,212	\$ 5.23
	=====	=====

	Number of Shares Outstanding at December 31, 2004	Weighted Average Exercise Price	Remaining Contractual Life	Number of Shares Exercisable at December 31, 2004	Weighted Average Exercise Price
	-----	-----	-----	-----	-----
Options granted between \$0.27 and \$1.11	148,150	\$ 1.00	1.1	148,150	\$ 1.00
Options granted between \$1.11 and \$2.21	979,370	\$ 1.88	6.8	447,395	\$ 1.90
Options granted between \$2.21 and \$3.32	1,493,907	\$ 2.77	6.9	472,094	\$ 2.64
Options granted between \$3.32 and \$4.42	2,156,057	\$ 3.73	7.8	540,860	\$ 3.74
Options granted between \$4.42 and \$5.53	348,750	\$ 4.62	8.9	10,187	\$ 4.56
Options granted between \$5.53 and \$6.64	575,514	\$ 6.37	6.6	429,030	\$ 6.37
Options granted between \$6.64 and \$7.74	491,375	\$ 6.90	9.7	8,937	\$ 7.37
Options granted between \$7.74 and \$8.85	1,134,800	\$ 8.61	6.1	854,223	\$ 8.78
Options granted between \$8.85 and \$9.96	10,800	\$ 9.69	5.3	9,900	\$ 9.73
Options granted between \$9.96 and \$11.06	107,800	\$10.93	2.4	101,436	\$10.94
	-----	-----	-----	-----	-----
	7,446,523			3,022,212	
	=====			=====	

Prior to February 9, 2001, the Company granted certain options to employees having exercise prices below what was considered the fair value of the underlying stock. The Company amortized to expense \$80,791 in 2004, \$387,709 in 2003 and \$994,078 in 2002 using an accelerated vesting method whereby each of the years' vesting components is amortized over its own vesting period. During 2004, 2003 and 2002, in connection with employee terminations, the Company extended the exercise period and accelerated vesting for certain option grants. Accordingly, the options had a new measurement date and were expensed based upon their new intrinsic value. Also, options granted to non-employee consultants are measured based upon their fair value as calculated using the Black-Scholes option pricing model. Option expense related to such terminations in 2004, 2003 and 2002 was \$2,945,664, \$973,958 and \$102,749, respectively.

Included in operating expenses are the following stock compensation charges, net of reversals related to terminated employees:

	YEAR ENDED DECEMBER 31		
	2004	2003	2002
	-----	-----	-----
Cost of goods sold	\$ 155,275	\$ 86,793	\$ 163,590
Research and development	1,133,617	504,477	98,753
Selling and marketing	144,519	215,935	31,781
General and administrative	1,593,044	554,462	802,703
	-----	-----	-----
	\$ 3,026,455	\$ 1,361,667	\$ 1,096,827
	=====	=====	=====

The weighted-average fair value of options granted in 2004, 2003, and 2002 was \$3.49, \$2.50 and \$1.73, respectively, using the Black-Scholes option-pricing model. The calculations were made assuming a dividend yield of 0%, a weighted-average expected option life of five years and a weighted-average risk-free interest rate of 4.1%, 4.0% and 4.0% in 2004, 2003 and 2002, respectively. The volatility factor used in the Black-Scholes method for 2004, 2003 and 2002 was .84, .89 and .97, respectively.

5. INCOME TAXES

The provision for income taxes in 2004 represents the amount computed under the alternative minimum tax (AMT) requirements.

The types of temporary differences between tax bases of assets and liabilities and their financial reporting amounts that give rise to the deferred tax asset (liability) and their approximate tax effects are as follows:

	DECEMBER 31	
	2004	2003
	-----	-----
Deferred tax assets:		
Patent expense	\$ 1,563,000	\$ 1,223,000
Stock compensation expense	609,000	806,000
Deferred revenue	154,000	27,000
Inventory obsolescence	260,000	300,000
Equipment and leasehold improvements	-	478,000
Accrued liabilities	1,945,000	1,452,000
Other	168,000	85,000
AMT credit carryforward	57,000	-
Net operating loss carryforwards	45,321,000	45,899,000
	-----	-----
Total deferred tax assets	50,077,000	50,270,000
Valuation allowance	(48,369,000)	(48,010,000)
	-----	-----
Net deferred tax assets	1,708,000	2,260,000
	-----	-----
Deferred tax liabilities:		
Equipment and leasehold improvements	(49,000)	-
Intangibles	(1,659,000)	(2,260,000)
	-----	-----
Deferred tax liabilities	(1,708,000)	(2,260,000)
	-----	-----
Net deferred tax assets / (liabilities)	\$ -	\$ -

=====
=====
At December 31, 2004, the Company had net operating loss carryforwards of approximately \$113 million for U.S. federal and state income tax purposes, which expire beginning in 2008. In the event of a change in ownership greater than 50% in a three-year period, utilization of the net operating losses may be subject to a substantial annual limitation due to the ownership change limitations provided by the Internal Revenue Code of 1986 and similar state provisions.

At December 31, 2004, the Company had \$57,000 of AMT credits which do not expire. The valuation allowance at December 31, 2004 and 2003 was provided because of the Company's history of net losses and uncertainty as to the realization of the deferred tax assets. Through December 31, 2004, the Company's foreign subsidiary has operated at a loss, and accordingly, no provision for U.S. deferred taxes has been provided. Any earnings of the foreign subsidiary would be considered to be permanently invested.

6. LEASE OBLIGATIONS

The Company leases its corporate facility under an operating lease effective through September 2011. The Company has the option to extend the lease for three additional five-year periods. The lease agreement required a \$1,000,000 upfront payment and requires the Company to provide the landlord an irrevocable standby letter of credit of \$1,300,000, which is collateralized by a certificate of deposit included in short-term investments. Ongoing rent payments increase during the lease term. Rent expense is being recorded by the Company on a straight-line basis over the amended lease term. At December 31, 2004 and 2003, long-term other assets includes approximately \$938,000 and \$1,078,000, respectively, of prepaid rent. In addition, at December 31, 2004 and 2003, other long-term liabilities includes approximately \$1,099,000 and \$728,000, respectively, of deferred rent.

In 2004, the Company entered into multiple capital leases for computer equipment, office equipment and furniture, totaling approximately \$230,000.

Future minimum lease payments by year are as follows:

	Capital Leases	Operating Leases
2005	\$ 76,076	\$ 1,806,000
2006	75,715	1,879,000
2007	52,057	1,954,000
2008	27,505	2,032,000
2009	27,505	2,113,000
Thereafter	9,126	3,913,000
	-----	-----
Total minimum lease obligations	267,984	\$ 13,697,000
	=====	=====
Less amounts representing interest	49,232	

Present value of minimum lease payments	218,752	
Less current portion of long-term lease obligations	66,867	

	\$151,885	
	=====	

Rent expense was approximately \$2,114,000, \$2,097,000 and \$2,473,000 in 2004, 2003 and 2002, respectively.

7. RESTRUCTURING AND OTHER CHARGES

During the third quarter of 2002, the Company announced a restructuring plan designed to simplify product development and manufacturing operations and reduce operating expenses. The restructuring charges recorded were determined based upon plans submitted by the Company's management and approved by the Board of Directors using information available at the time. The third quarter 2002 restructuring charge included \$2.2 million for the consolidation of facilities, \$500,000 for prepayment penalties mainly under capital lease arrangements, an impairment charge of \$10.8 million for abandoned leasehold improvements and equipment to be sold and \$900,000 of other costs related to the restructuring. The Company also recorded a \$1.1 million charge within cost of goods sold related to inventory that was considered obsolete based upon the restructuring plan.

During the fourth quarter of 2002, the Company completed an auction to sell equipment held for sale resulting from the restructuring. The auction resulted in significantly higher proceeds than the Company had anticipated in the third quarter of 2002. Accordingly, a credit of \$3.6 million was recorded as an offset to the restructuring charge in the fourth quarter of 2002. The Company also amended its corporate lease agreement during the fourth quarter of 2002, which resulted in an increase to the facilities charge of \$300,000. The facilities charge contained estimates based upon the Company's potential to sublease a portion of its corporate office beginning in 2004.

The Company continues to offer corporate office space for sublease, but it has been unable to sublease the space. Accordingly, in the fourth quarter of 2003 and 2004, the Company changed the amount it expects to receive from the sublease of the space. In 2004, the estimated lease and operating expenses were also reduced, based on a portion of the office space being utilized.

The following table shows the components of the restructuring and other charges and changes in the restructuring accrual through December 31, 2004. The remaining restructuring balance of \$1.1 million is for rent payments on a non-cancelable lease, net of estimated sublease income, which will continue to be paid over the lease term through 2011. The current portion of the accrual of \$162,043 is included in other accrued liabilities on the balance sheet and the remainder is included in other long-term liabilities.

	FACILITIES	EQUIPMENT AND LEASEHOLD IMPROVEMENTS DISPOSALS	PREPAYMENT PENALTIES	OTHER	TOTAL
Charge in 2002	\$ 2,470,438	\$ 7,175,995	\$ 494,930	\$ 945,870	\$11,087,233
Payments made	(312,400)	-	(469,300)	-	(781,700)
Non-cash charges	-	(7,175,995)	(25,630)	(140,290)	(7,341,915)
Accrued restructuring balance at December 31, 2002	2,158,038	-	-	805,580	2,963,618
Payments made	(674,809)	-	-	(874,765)	(1,549,574)
Revision to estimate	(69,185)	-	-	69,185	-
Accrued restructuring balance at December 31, 2003	1,414,044	-	-	-	1,414,044
Payments made	(199,196)	-	-	-	(199,196)
Revision to estimate	(98,000)	-	-	-	(98,000)
Accrued restructuring balance at December 31, 2004	\$ 1,116,848	\$ -	\$ -	\$ -	\$ 1,116,848

8. LICENSE AGREEMENTS

The Company entered into an exclusive license agreement (research license) in March 1994 to make, use and sell products utilizing the licensed patents in the research market. Under the research license, the Company is required to pay a royalty at a rate not to exceed a certain percentage of the selling price on licensed component sales. There have been no sales of licensed components through December 31, 2004. The research license will continue until the licensed patents expire or until the agreement is terminated by either party, whichever is earlier, as defined in the agreement. The Company also entered into an equity agreement with the licensor in March 1994 whereby it issued 115,200 shares of common stock in exchange for the research license and diagnostic market option, which is an exclusive license agreement to make, use and sell products utilizing the licensed patents in the diagnostic market. In October 1998, the Company issued 103,200 shares to the licensor to exercise the diagnostic market option. The shares issued in 1994 and 1998 were valued at amounts considered to approximate the fair value of common stock at the time of each issuance.

Under this agreement, the Company granted the licensor a put option to sell a specified number of shares back to the Company anytime after March 1, 1998. The total number of shares that can be put to the Company cannot exceed the number of shares necessary to achieve a purchase price of \$200,000. At December 31, 2004, the price per share to be paid if the put option is exercised is \$3.37. Accordingly, the Company has classified \$200,000 of additional paid-in capital outside of shareholders' equity in the accompanying balance sheets.

In October 2001, the Company entered into a development, license and supply agreement with RIKEN, Inc. (RIKEN). The Company licensed certain patent rights relating to polymorphism in genes that encode drug metabolizing enzymes from RIKEN for a nonrefundable fee which is being amortized over its estimated useful life (7.5 years). In 2003, the Company and RIKEN entered into

an additional license for similar content. The Company also pays royalties based upon net sales of licensed products in exclusive and nonexclusive territories.

In addition, the Company licensed rights to patents and/or patent applications covering genetic variations associated with certain diseases for which the Company has designed clinical diagnostic products.

9. COLLABORATIVE AGREEMENTS

In December 2000, the Company entered into a development and commercialization agreement with BML, Inc. (BML). Under this agreement, the Company developed assays in accordance with a mutually agreed development program for use in clinical applications by BML. In 2000, BML paid the Company a nonrefundable fee of \$3 million, which was recognized as revenue on a straight-line basis over the expected term of development services being performed by the Company. The Company recorded revenue from BML of \$917,000 and \$1,000,000 in 2003 and 2002, respectively. Additionally, in 2004, 2003 and 2002, BML paid the Company \$1,915,000, \$1,500,000 and \$1,683,000, respectively, for product and specified services performed in these respective years, which was recognized as revenue as the product was shipped and services were performed.

On October 16, 2002, the Company entered into a license and supply agreement with Aclara Biosciences, Inc. (Aclara) under which Aclara has the non-exclusive right to incorporate the Company's Invader(TM) technology and Cleavase(R) enzyme with Aclara's eTag(TM) technology to offer the eTag Assay System for multiplexed gene expression applications for the research market. In exchange, Aclara made certain upfront payments and will make royalty payments to the Company on sales of eTag-Invader gene expression assays. The Company has also provided Aclara with certain manufacturing materials for use in manufacturing Invader products. In connection with this agreement, the Company recorded revenue of \$1,500,000 related to the license granted and \$2,780,000 for product shipped to Aclara during 2002. The Company received royalty revenue of \$150,000 and \$100,000 in 2004 and 2003, respectively. In December 2004, Aclara was acquired by Virologics, Inc.

10. 401(k) PLAN

The Company has a 401(k) savings plan (the Plan) which covers substantially all employees. The Plan provides for Company contributions of 50% of employee contributions up to 6% of their compensation. Company contributions to the plan were approximately \$329,000, \$311,000 and \$331,000 in 2004, 2003 and 2002, respectively.

11. SEGMENT DISCLOSURE

The Company operates in one industry segment. Product revenues to international end-users accounted for 70%, 78% and 70% of product revenues in 2004, 2003 and 2002, respectively. At December 31, 2004 and 2003, approximately \$2,681,000 and \$1,011,000, respectively, of receivables are denominated in Yen. Product revenues by geographic area in 2004, 2003 and 2002, were as follows:

	2004	2003	2002
	-----	-----	-----
United States	\$ 13,759,367	\$ 7,668,573	\$ 8,700,680
Japan	31,361,485	26,983,342	19,865,716
Other	895,275	496,382	314,546
	-----	-----	-----
	\$ 46,016,127	\$ 35,148,297	\$ 28,880,942
	=====	=====	=====

12. QUARTERLY FINANCIAL DATA (UNAUDITED)

The following sets forth selected quarterly financial and stock price information for the years ended December 31, 2004 and 2003 (in thousands, except per share data). The operating results are not necessarily indicative of results for any future period.

	QUARTER ENDED			
	MARCH 31	JUNE 30	SEPTEMBER 30	DECEMBER 31
	-----	-----	-----	-----
2004:				
Net revenues	\$ 15,276	\$ 12,632	\$ 10,479	\$ 8,106
Gross margin (1)	11,105	8,939	8,144	5,813
Net income (loss)	2,848	(106)	24	(4,708)
Basic and diluted net income (loss) per share	\$ 0.07	\$ (0.00)	\$ 0.00	\$ (0.12)
2003:				
Net revenues	\$ 8,492	\$ 8,817	\$ 9,354	\$ 9,657

Gross margin	5,403	5,442	6,094	6,541
Net loss	(2,924)	(2,161)	(1,435)	(1,596)
Basic and diluted net loss per share	\$ (0.07)	\$ (0.05)	\$ (0.04)	\$ (0.04)

- (1) Previously reported 2004 quarterly gross margin amounts have been adjusted for reclassifications of manufacturing costs between cost of goods sold and research and development expense. For the first, second and third quarters of 2004, gross margins were previously reported as \$11,204, \$9,142 and \$7,838, respectively.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES

As required by Rule 13a-15(b) under the Securities Exchange Act of 1934, the Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, conducted an evaluation as of the end of the period covered by this report, of the effectiveness of the Company's disclosure controls and procedures as defined in Rules 13a-15(e) under the Securities Exchange Act of 1934. Based on that evaluation, the Company's Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures were effective as of the end of the period covered by this report. There have been no significant changes during the period covered by this report in the Company's internal control over financial reporting or in other factors that could significantly affect internal control over financial reporting.

EVALUATION OF INTERNAL CONTROL OVER FINANCIAL REPORTING

The management of Third Wave Technologies is responsible for establishing and maintaining adequate internal control over financial reporting. Third Wave's internal control system was designed to provide reasonable assurance to the Company's management and board of directors regarding the preparation and fair presentation of published financial statements.

All internal control systems, no matter how well designed, have inherent limitations. Even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

Third Wave's management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2004, using the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control - Integrated Framework. Based on management's assessment, management believes that, as of December 31, 2004, the Company's internal control over financial reporting is effective.

Third Wave's independent auditors have issued an audit report on management assessment of the Company's internal control over financial reporting, which is included herein.

Report of Independent Registered Public Accounting Firm on
Internal Control over Financial Reporting

To the Board of Directors
Third Wave Technologies, Inc.

We have audited management's assessment, included in the accompanying Management's Report on Internal Control over Financial Reporting, that Third Wave Technologies, Inc. maintained effective internal control over financial reporting as of December 31, 2004, based on criteria established in Internal Control--Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Third Wave Technologies, Inc.'s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on management's assessment and an opinion on the effectiveness of the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, management's assessment that Third Wave Technologies, Inc. maintained effective internal control over financial reporting as of December 31, 2004, is fairly stated, in all material respects, based on the COSO criteria. Also, in our opinion, Third Wave Technologies, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2004, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Third Wave Technologies, Inc. as of December 31, 2004 and 2003, and the related consolidated statements of operations, shareholders' equity and cash flows for each of the three years in the period ended December 31, 2004 and our report dated March 4, 2005 expressed an unqualified opinion thereon.

Ernst & Young LLP

Milwaukee, Wisconsin
March 4, 2005

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

The Company incorporates by reference the information required by this Item from the Company's definitive proxy statement for its annual meeting of shareholders scheduled to be held on June 14, 2005 (the "Proxy Statement"), which will be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the Company's fiscal year.

ITEM 11. EXECUTIVE COMPENSATION

The Company incorporates by reference the information required by this Item from the Proxy Statement.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The Company incorporates by reference the information required by this Item from the Proxy Statement.

Information required with respect to the securities authorized for issuance under the Company's equity compensation plans, including plans that have previously been approved by the Company's stockholders and plans that have not previously been approved by the Company's stockholders, will be set forth in the Proxy Statement, and such information is incorporated by reference from the Proxy Statement.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The Company incorporates by reference the information required by this Item from the Proxy Statement.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The Company incorporates by reference the information required by this Item from the Proxy Statement.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) Documents Filed as a Part of this Report.

1. Financial Statements. The financial statements required to be filed as part of this Report are listed on page 32.
2. Financial Statement Schedules. The following financial statement schedule required to be filed as part of this Report is included on page 53.

Schedule II--Valuation and Qualifying Accounts. Schedules not included have been omitted because they are not applicable.
3. Exhibits. The exhibits required to be filed as a part of this Report are listed in the Exhibit Index.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on March 16, 2005.

THIRD WAVE TECHNOLOGIES, INC.

By: /s/ John J. Puisis

John J. Puisis
Chief Executive Officer

POWER OF ATTORNEY

We, the undersigned directors and executive officers of Third Wave Technologies, Inc., hereby severally constitute and appoint of Kevin T. Conroy our true and lawful attorney and agent, with full power to him to sign for us, and in our names in the capacities indicated below, any and all amendments to the Annual Report on Form 10-K of Third Wave Technologies, Inc. filed with the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorney to any and all amendments to said Annual Report on Form 10-K.

Pursuant to the requirements of the Securities and Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated on dates indicated.

SIGNATURE	TITLE	DATE
/s/ Lance Fors ----- Lance Fors	Chairman of the Board	March 13, 2005
/s/ John Puisis ----- John Puisis	Chief Executive Officer President, and Director (Principal Executive Officer)	March 15, 2005
/s/ James J. Herrmann ----- James J. Herrmann	Vice President of Finance (Principal Financial Officer)	March 15, 2005
/s/ Gordon F. Brunner ----- Gordon F. Brunner	Director	March 14, 2005
----- G. Steven Burrill	Director	
----- Sam Eletr	Director	
/s/ John Neis ----- John Neis	Director	March 14, 2005
/s/ Lloyd M. Smith ----- Lloyd M. Smith	Director	March 12, 2005
/s/ Lionel Sterling ----- Lionel Sterling	Director	March 12, 2005
/s/ David A. Thompson ----- David A. Thompson	Director	March 14, 2005

EXHIBIT INDEX

Certain of the following exhibits, as indicated parenthetically, were previously filed as exhibits to registration statements filed by the Company under the Securities Act of 1933, as amended (the "Securities Act"), or to reports or registration statements filed by the Company under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and are hereby incorporated by reference to such statements or reports. The Company's Exchange Act file number is 000-31745.

Exhibits marked with an asterisk (*) indicate portions of the exhibit have received confidential treatment. Exhibits marked with a double asterisk (**) indicate a management contract or compensatory plan or arrangement.

EXHIBIT NO.	DESCRIPTION	INCORPORATED BY REFERENCE TO
3.1	Amended and Restated Certificate of Incorporation of the Registrant, dated as of August 16, 2000	Exhibit 3.1(b) to the Registrant's Registration Statement on Form S-1, Registration No. 333-42694, filed on July 31, 2000, as amended
3.2	Amended and Restated Bylaws of the Registrant, dated as of February 9, 2001	Exhibit 3.2(b) to the Registrant's Registration Statement on Form 8-A, File No. 000-31745, filed on November 30, 2001
4.1	Investors' Rights Agreement, dated as of July 24, 2000	Exhibit 4.2 to the Registrant's Registration Statement on Form S-1, Registration No. 333-42694, filed on July 31, 2000, as amended
4.2	Rights Agreement between the Registrant and EquiServe Trust Company N.A., dated as of October 24, 2001	Exhibit 4.9 to the Registrant's Registration Statement on Form 8-A, File No. 000-31745, filed on November 30, 2001
4.3	Amendment No. 1 to the Rights Agreement between the Registrant and EquiServe Trust Company N.A., dated February 18, 2003	Exhibit 4.2 to the Registrant's Registration Statement on Form 8-A/A, File No. 000-31745, filed on February 19, 2003
10.1**	Incentive Stock Option Plan	Exhibit 10.1 to the Registrant's Registration Statement on Form S-1, Registration No. 333-42694, filed on July 31, 2000, as amended
10.2**	1997 Incentive Stock Option Plan	Exhibit 10.2 to the Registrant's Registration Statement on Form S-1, Registration No. 333-42694, filed on July 31, 2000, as amended
10.3**	1997 Nonqualified Stock Option Plan	Exhibit 10.3 to the Registrant's Registration Statement on Form S-1, Registration No. 333-42694, filed on July 31, 2000, as amended
10.4**	1998 Incentive Stock Option Plan	Exhibit 10.4 to the Registrant's Registration Statement on Form S-1, Registration No. 333-42694, filed on July 31, 2000, as amended
10.5**	1999 Incentive Stock Option Plan	Exhibit 10.5 to the Registrant's Registration Statement on Form S-1, Registration No. 333-42694, filed on July 31, 2000, as amended
10.6**	1999 Nonqualified Stock Option Plan	Exhibit 10.6 to the Registrant's Registration Statement on Form S-1, Registration No. 333-42694, filed on July 31, 2000, as amended
10.7**	2000 Stock Plan	Exhibit 10.7 to the Registrant's Registration Statement on Form S-1, Registration No. 333-42694, filed

		on July 31, 2000, as amended
10.8**	2000 Employee Stock Purchase Plan	Exhibit 10.8 to the Registrant's Registration Statement on Form S-1, Registration No. 333-42694, filed on July 31, 2000, as amended
10.9**	Form of Director and Executive Officer Indemnification Agreement	Exhibit 10.9 to the Registrant's Registration Statement on Form S-1, Registration No. 333-42694, filed on July 31, 2000, as amended

EXHIBIT NO.	DESCRIPTION	INCORPORATED BY REFERENCE TO
10.10	Lease Agreement, dated as of April 1, 1997, between the Registrant and University Research Park Facilities Corp. and amendment, dated as of September 1, 2001	Exhibit 10.18 to the Registrant's Registration Statement on Form S-1, Registration No. 333-42694, filed on July 31, 2000, as amended
10.11	Amendment to Lease between Registrant and University Research Park Facilities Corp. dated as of September 1, 2002	Exhibit 10.11 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2002
10.12	Development and Commercialization Agreement, dated as of December 29, 2000, between the Registrant and BML,	Exhibit 10.26 to the Registrant's Registration Statement on Form S-1, Registration No. 333-42694, filed on Inc. July 31, 2000, as amended
10.13	License Agreement dated as of October 15, 2002 between Registrant and Aclara Biosciences, Inc.	Exhibit 10.14 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2002
10.14	Employment Agreement between Lance Fors and Third Wave Technologies, Inc. dated October 16, 2003	Exhibit 10.16 to Registrant's Annual Report on Form 10-K for the fiscal year ended on December 31, 2003
10.15	Employment Agreement between John Puisis and Third Wave Technologies, Inc. dated September 19, 2001 and Amendment dated July 17, 2003	Exhibit 10.17 to Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2003
10.16	Amendment No. 2 to Employment Agreement between John Pulsis and Third Wave Technologies, Inc. effective June 14, 2004	Exhibit 10.2 to Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2004
10.17	Code of Business Conduct	Third Wave Technology's website, www.twt.com
10.18	Third Wave Technologies, Inc. Amended LTIP 1	
10.19	Third Wave Technologies, Inc. LTIP 2	
10.20	Separation Agreement between Registrant and John Comerford	
10.21	Separation Agreement between Registrant and David Nuti and Amendment dated October 21, 2004	
10.22	Employment Agreement between Kevin T. Conroy and Third Wave Technologies, Inc. dated March 14, 2005	
10.23	Employment Agreement between James J. Herrmann and Third Wave Technologies, Inc. dated March 14, 2005	
21	List of Subsidiaries	
23	Consent of Independent Registered Public Accounting Firm	
24	Powers of Attorney (contained in the	

signature page hereto)

- 31.1 CEO's Certification Pursuant to Section 302 of the Sarbanes Oxley Act of 2002
- 31.2 Principal Financial Officer Certification pursuant to Section 302 of the Sarbanes Oxley Act of 2002.
- 32.1 CEO's Certification pursuant to 18 U.S.C. Section 1350, of Chapter 63 of Title 18 of the United States Code
- 32.2 Principal Financial Officer's Certification pursuant to 18 U.S.C Section 1350, of Chapter 63 of Title 18 of the United States Code

SCHEDULE II: VALUATION AND QUALIFYING ACCOUNTS
YEARS ENDED DECEMBER 31, 2004, 2003, AND 2002

DESCRIPTION	BALANCE AT BEGINNING OF YEAR	ADDITIONS CHARGED TO EXPENSE	(1) DEDUCTIONS	BALANCE AT END OF YEAR

(DOLLARS IN THOUSANDS)				
Allowance for doubtful accounts receivable:				
2002	\$ 175	\$ 455	\$ 165	\$ 465
2003	\$ 465	\$ 402	\$ 727	\$ 140
2004	\$ 140	\$ 177	\$ 17	\$ 300
	=====	=====	=====	=====
Allowance for excess and obsolete inventory:				
2002	\$ 2,680	\$ 2,015	\$ 1,645	\$ 3,050
2003	\$ 3,050	\$ 1,308	\$ 3,608	\$ 750
2004	\$ 750	\$ 805	\$ 905	\$ 650
	=====	=====	=====	=====

(1) Represents amounts written off or disposed, net of recoveries.

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THIRD WAVE TECHNOLOGIES, INC. LONG TERM INCENTIVE PLAN NO. 1

1. PLAN OBJECTIVE

The Third Wave Technologies, Inc. Long Term Incentive Plan (referred to as the "Plan") is designed to encourage results-oriented actions on the part of members of the executive management team and other key employees of Third Wave Technologies, Inc. (the "Company"). The Plan is intended to align closely financial rewards for the employees with the achievement of specific performance objectives by the Company. The Plan, as amended and restated effective as of January 1, 2004, provides as follows:

2. ELIGIBILITY

Members of the executive management team of the Company ("Tier 1 Employees") and other key employees of the Company ("Tier 2 Employees") are eligible to participate in the Plan. The Administrator (as defined in Section 3 below) shall select the Tier 1 Employees and Tier 2 Employees who may participate in the Plan (a "Participant").

3. ADMINISTRATION

(a) The Plan shall be administered by the Compensation Committee of the Company's Board of Directors (the "Administrator"). The Administrator may delegate its authority to administer the Plan to an individual or committee. The term "Administrator" shall mean the Compensation Committee or such individual or committee to which authority has been delegated.

(b) The Administrator shall have full power and authority to establish the rules and regulations relating to the Plan, to interpret the Plan and those rules and regulations, to select each Participant for the Plan, to determine the Participant's target award, performance goals and final award, to make all factual and other determinations in connection with the Plan, and to take all other actions necessary or appropriate for the proper administration of the Plan, including the delegation of such authority or power, where appropriate. The Administrator may adjust the performance goals to take into account corporate transactions that take into account new revenue associated with mergers and/or acquisitions or other corporate transactions in an equitable manner that does not make it more difficult for the Company to achieve the original performance goals.

(c) All powers of the Administrator shall be executed in its sole discretion, in the best interest of the Company, not as a fiduciary, and in keeping with the objectives of the Plan and need not be uniform as to similarly situated individuals. The Administrator's administration of the Plan, including all such rules and regulations, interpretations, selections, determinations, approvals, decisions, delegations, amendments, terminations, and other actions, shall be final and binding upon the Company and all employees of the Company, including each Participant and his or her respective beneficiary(ies).

4. TARGET AWARDS AND PERFORMANCE GOALS

(a) The Administrator shall establish for each Participant who completes and returns an enrollment agreement, in a form designated by the Administrator, a target award that shall be payable if and to the extent the Company attains the performance goals set by the Administrator for a specified performance period. The executed enrollment agreement shall constitute a Participant's consent to be subject to the terms of the Plan and to be bound by the authority of the Administrator as set forth in Section 3.

(i) Unless the Administrator determines otherwise, the target award for a Participant who is a Tier 1 Employee shall be an amount equal to three times the highest annual incentive target amount established for the Participant during the performance period under the Company's annual incentive plan applicable to the Participant.

(ii) Unless the Administrator determines otherwise, the target award for a Participant who is a Tier 2 Employee shall be an amount equal to two times the highest annual incentive target amount established for the Participant during the performance period under the Company's annual incentive plan applicable to the Participant.

(b) The Administrator shall establish the performance goals and related calculation matrices for each performance period and shall promptly provide this information to each Participant who is eligible for an award for that performance period. The performance goals are attached as Exhibit A and are hereby fully incorporated into and shall be considered as part of this Plan. Unless the Administrator determines otherwise, the performance goals shall be based upon (i) the Company's total shareholder return ranking as compared to its peer group, (ii) the Company's stock price growth, and (iii) the growth in the Company's Clinical Molecular Diagnostics revenue. The Administrator may adjust the performance goals as it deems appropriate to take into account corporate transactions or other extraordinary events that occur during the performance period.

(c) For the purposes of subsection (b), the Administrator shall have the discretion to determine which companies are included in the peer group. The Administrator may adjust the peer group from time to time as it deems appropriate, including by adding, deleting, or replacing companies, to take into account mergers and other changes in the companies comprising the peer group.

(d) Unless the Administrator determines otherwise, each performance period shall be a three-year period beginning on January 1, 2004 and ending on December 31, 2007.

5. CALCULATION OF INCENTIVE AWARDS

(a) At the end of the performance period, the Administrator shall determine for each participant whether and to what extent the performance goals have been met and the percentage of the target award that is earned. The Administrator shall rely upon the audited financial statements of the Company and its subsidiaries to determine whether and to what extent the performance goals are met.

(b) The Administrator shall compute each Participant's award for the performance period based upon the Company's achievement of the performance goals and the matrices set forth on Exhibit A. On or around March 15 of the year following the end of the applicable performance period, the Company shall credit each Participant's award to a book account established for the Participant. All amounts credited to a Participant's book account shall be administered according to the vesting provisions of Section 6 below.

(c) Participants must be employed on the last day of the applicable performance period to be eligible for an incentive award under the Plan, except as described below or except as the Administrator may otherwise determine.

(i) The beneficiary(ies) of a Participant who dies during a performance period shall receive a prorated award based upon the Company's performance at the end of such performance period. The prorated award shall be calculated from the commencement of the performance period, or, if applicable, such later date on which the Participant became eligible to participate for the performance period as established by the Administrator, to the date of the Participant's death. The Company shall pay the prorated award to the beneficiary(ies) after end of the performance period pursuant to Section 8 below.

(ii) Participants who retire on or after their normal retirement age (as defined below) during the performance period shall receive a prorated award based upon the Company's performance at the end of such performance period. The prorated award shall be calculated from the commencement of the performance period, or, if applicable, such later date on which the Participant became eligible to participate for the performance period as established by the Administrator, to the date of the Participant's normal retirement. The Company shall pay the prorated award to the Participant after the end of the performance period pursuant to Section 8 below. For purposes of this Plan, "normal retirement age" is age 65, or, if the Participant has at least five years of service, age 55.

(iii) Participants who become disabled (as defined below) during the performance period shall receive a prorated award based upon the Company's performance at the end of such performance period. The prorated award shall be calculated from the commencement of the performance period, or, if applicable, such later date on which the Participant became eligible to participate for the performance period as established by the Administrator, to the date the Participant is disabled. The Company shall pay the prorated award to the Participant after the end of the performance period pursuant to Section 8 below. For purposes of this Plan, "disabled" means eligible for long-term disability benefits as determined under a Company-sponsored disability plan.

(iv) Upon a Change in Control (as defined below) of the Company during the performance period, all performance goals pertaining to awards during such performance period shall be deemed to have been met 100 percent as of the effective date of the Change in Control and the maximum award for such performance period shall be deemed immediately earned, and such maximum award shall vest and be paid as described in Section 6(d). The Company shall credit the maximum award to a book account established for the Participant as soon as practicable after the Change of Control.

For purposes of the Plan, the term "Change in Control" shall mean, and shall be deemed to have occurred if, (i) any "person" (as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended) or group acting in concert, other than a trustee or other fiduciary holding securities under an employee benefit plan of the Company acting in such capacity or a corporation owned directly or indirectly by the stockholders of the Company in substantially the same proportions as their ownership of stock of the Company, becomes the "beneficial owner" (as defined in Rule 13d-3 under said Act), directly or indirectly, of securities of the Company representing more than 50 percent of the total voting power represented by the Company's then outstanding voting securities; (ii) during any period of two consecutive years, individuals who at the beginning of such period constitute the Board of Directors of the Company and any new director whose election by the Board of Directors or nomination for election by the Company's stockholders was approved by a vote of at least two thirds (2/3) of the directors then still in office who either were directors at the beginning of the period or whose election or nomination for election was previously so approved, cease for any reason to constitute a majority thereof; (iii) consummation of a merger or consolidation of the Company with any other corporation other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) at least 80 percent of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation; (iv) the stockholders of the Company approve a plan of complete liquidation of the Company; or (v) the Company consummates a sale or disposition of (in one transaction or a series of related transactions) all or substantially all of its assets.

(d) In the event this Plan is terminated or suspended before the last day of a performance period, Participants who are employed by the Company on the day of such termination period shall receive an award based upon the Company's performance through the end of such performance period as if no such termination had occurred. The award shall be calculated from the commencement of the performance period, or, if applicable, such later date on which the Participant became eligible to participate for the performance period as established by the Administrator, to the end of the performance period. The Company shall credit the award to a book account established for the Participant as soon as practicable after the end of the performance period. Awards made pursuant to this subsection shall vest and be paid in accordance with the terms of the Plan as though the Plan had not been terminated or suspended.

(e) The Administrator may establish appropriate terms and conditions to accommodate newly hired and transferred employees. For example, upon a Participant's being designated to participate in the Plan, the Administrator may establish, in its discretion, the effective commencement date for such Participant for each performance period that has commenced but not then ended, and if such effective commencement date is established as a date later than the commencement of a particular pending performance period, any award for that performance period may be prorated based on such later effective commencement date. Absent any action to the contrary, new employees that become Participants shall be entitled to a commencement date effective as of the beginning of the plan period.

6. VESTING OF INCENTIVE AWARDS

(a) If a Participant earns an award as described in Section 5 for a performance period, except as provided below in this Section 6, 25 percent of the award shall vest on the last day of the performance period, 50 percent of the award shall vest on the last day of the year following the end of such performance period, and the remaining 25 percent of the award shall vest on the last day of the second year following the end of such performance period, provided the Participant continues to be employed by the Company or an affiliate through such applicable vesting date.

(b) If a Participant retires at or after his or her normal retirement age, becomes disabled, or dies while employed by the Company, the Participant's award shall be fully vested at the end of the performance period or at the time such event occurs, whichever is later.

(c) Unless otherwise specified elsewhere in this agreement or any valid employment or other agreement between the Participant and the Company, if a Participant's employment with the Company and its affiliates terminates for any reason, any unvested award shall be forfeited to the Company as of his or her termination date.

(d) In the event of a Change in Control during any performance period, Participants who are employed by the Company on the effective date of the Change in Control shall be eligible to receive, and shall be deemed vested in, the maximum award payout for each such performance period as follows: (A) fifty percent (50%) of the maximum award payout shall be deemed vested and shall be paid upon the effective date of the Change in Control, and (B) fifty percent (50%) of the maximum award payout shall be deemed vested and shall be paid on the earliest date at either (x) six (6) months after the effective date of the Change in Control, (y) upon Participant's termination without Cause, or resignation for Good Reason (applicable only if "Good Reason" concept is defined in a valid employment agreement between Company and Participant), occurring prior to the six (6) month anniversary of the effective date of the Change in Control, or (z) the date on which such portion of the award would have vested in the absence of a Change in Control pursuant to Section 6(a) or (b) above. For purposes of the Plan, the term "Cause" shall mean any of the following grounds for termination of the Participant's employment:

(i) any willful refusal to perform essential job duties which continues for more than ten (10) days after notice from the Company;

(ii) any intentional act of fraud or embezzlement by the Employee in connection with the Employee's duties or committed in the course of Employee's employment;

(iii) any gross negligence or willful misconduct of the Employee with regard to the Company or any of its subsidiaries resulting in a material economic loss to the Company;

(iv) the Participant is convicted of a felony;

(v) the Participant is convicted of a misdemeanor the circumstances of which involve fraud, dishonesty or moral turpitude and which is substantially related to the circumstances of Participant's job with the Company;

(vii) any willful and material violation by the Employee of any statutory or common law duty of loyalty to the Company or any of its subsidiaries resulting in a material economic loss; or

(vii) any material breach by the Employee of his or her employment or non-compete agreements, if any exist.

For purposes of the Plan, the term "Good Reason" shall mean, and shall be deemed to have the meaning set forth in any valid employment agreement being Participant and Company.

(e) If a Participant earns an award as described in Section 5 for a performance period, and thereafter there is a Change in Control, Participants who are employed by the Company on the effective date of the Change in Control shall be eligible to receive, and shall be deemed vested in, the unvested portion of the award as of the effective date of the Change in Control as follows: (A) fifty percent (50%) of such unvested portion of the award shall be deemed immediately vested and shall be paid on the effective date of the Change in Control, and (B) fifty percent (50%) of such unvested portion of the award shall be deemed vested and shall be paid on the earliest date of (x) six (6) months after the effective date of the Change in Control, (y) upon the Participant's termination without Cause, or resignation for Good Reason, occurring prior to the six (6) month anniversary of the effective date of the Change in Control, or (z) the date on which such portion of the award would have vested in the absence of a Change in Control pursuant to Sections 6(a) or 6(b) above.

(f) A transfer of employment between the Company and an affiliate shall not be considered a termination of employment for purposes of the Plan.

(g) The Administrator reserves the right to accelerate vesting whenever the Administrator deems such action appropriate.

(h) Prior to a Change in Control, the Company shall deposit in a separate bank account sufficient funds to cover both the vested and unvested cumulative award amounts so that funding of vested awards can take place upon the Change in Control closing.

(i) In the event of a Change in Control whereby the Company's Compensation Committee of the Board of Directors no longer exists, the Administrator shall be deemed to be the individual who at the time of the Change of Control are the Company's General Counsel and principal financial officer.

7. CHANGES TO PERFORMANCE GOALS AND TARGET AWARDS

At any time prior to the final determination of awards pursuant to Section 5, the Administrator may adjust the performance goals and target awards to reflect a change in corporate capitalization (such as a stock split or stock dividend), or a corporate transaction (such as a merger, consolidation, separation, reorganization, or partial or complete liquidation), or to reflect equitably the occurrence of any extraordinary event, any change in applicable accounting rules or principles, any change in the Company's method of accounting, any change in applicable law, any change due to any merger, consolidation, acquisition, reorganization, stock split, stock

dividend, combination of shares, or other changes in the Company's corporate structure or shares, or any other change of a similar nature.

8. PAYMENT OF AWARDS

(a) Unless determined otherwise by the Administrator, a Participant may elect, in the manner specified by the Administrator, to receive payment of his or her award in (i) cash, (ii) shares of the Company's common stock valued as of the day that is five business days before the date of distribution, or (iii) a combination. Except as provided in subsection (b), payment shall be made as soon as administratively possible following the vesting of an award. Participants who elect to take a distribution of their award in the form of the Company's stock, rather than in cash, shall receive a 10 percent increase in the number of shares of the Company's stock otherwise to be distributed. The distribution of the Company's stock shall be made in accordance with the Third Wave Technologies, Inc. 2000 Stock Plan, pursuant to Section 11 of such plan, or the comparable provisions of any successor stock plan adopted by the Company.

(b) Unless the Administrator determines otherwise, a Participant who is eligible to participate in the Company's deferred compensation program, if one exists, may make an irrevocable written election to defer all or any part of the payment of such award pursuant to a separate deferred compensation arrangement sponsored by the Company.

(c) Subject to applicable state law and the notification to, or consent of, a Participant's spouse, as required, each Participant may designate a beneficiary or beneficiaries (which beneficiary may be an entity other than a natural person) to receive any payments which are to be made following the Participant's death. Such designation may be changed or canceled at any time without the consent of any such beneficiary but again subject to applicable state law and the notification to, or consent of, a Participant's spouse, as required. Any such designation, change, or cancellation must be made on a form approved by the Administrator and shall not be effective until received by the Administrator or its designee. If no beneficiary has been named, or the designated beneficiary or beneficiaries shall have predeceased the Participant, the beneficiary shall be the Participant's surviving spouse or, if none, the Participant's estate. If a Participant designates more than one beneficiary, the interests of such beneficiaries shall be paid in equal shares, unless the Participant has specifically designated otherwise.

9. AMENDMENTS AND TERMINATION

The Company may at any time amend, suspend, or terminate the Plan or any portion thereof; provided that no amendment that would adversely affect the rights of a Participant may take effect without such Participant's prior written consent. Notwithstanding the foregoing, the Company shall have the right to modify the terms of the Plan as may be necessary or desirable to comply with applicable laws.

10. MISCELLANEOUS PROVISIONS

(a) Neither the establishment of this Plan, nor any action taken hereunder, shall be construed as giving any Participant any right to be retained in the employ of the Company or any of its subsidiaries. Nothing in the Plan, and no action taken pursuant to the Plan, shall affect the

right of the Company or a subsidiary to terminate a Participant's employment at any time and for any or no reason. The Company is under no obligation to continue the Plan. Notwithstanding the foregoing, the Company acknowledges that certain Participants may have separate employment or other agreements with the Company and those agreements may include terms and conditions affecting the terms and conditions of awards that may be made under this Plan.

(b) A Participant's right and interest under the Plan may not be assigned or transferred, except as provided in Section 5(c)(i) of the Plan upon death, and any attempted assignment or transfer shall be null and void and shall extinguish, in the Company's sole discretion, the Company's obligation under the Plan to pay award(s) with respect to the Participant. The Company's obligations under the Plan may be assigned to any corporation which acquires all or substantially all of the Company's assets or any corporation into which the Company may be merged or consolidated.

(c) The Plan shall be unfunded. The Company shall not be required to establish any special or separate fund, or to make any other segregation of assets, to assure payment of awards. The Company's obligations hereunder shall constitute a general, unsecured obligation of the Company, and awards shall be paid solely from the Company's general assets. No Participant shall have any right to any specific assets of the Company.

(d) The Company shall have the right to deduct from awards any and all federal, state, and local taxes or other amounts required by law to be withheld.

(e) The Company's obligation to pay compensation as herein provided is subject to any applicable orders, rules, or regulations of any government agency or office having authority to regulate the payment of wages, salaries, and other forms of compensation.

(f) The validity, construction, interpretation, and effect of the Plan shall exclusively be governed by and determined in accordance with the laws of the State of Wisconsin.

EXHIBIT A

THIRD WAVE LONG TERM INCENTIVE MATRIX (1/1/04 - 12/31/06)

Payout as a Percent of Target

TWT STOCK PRICE	>\$ 12	25.0%	35.0%	40.0%	45.0%	50.0%	62.5%	75.0%	87.5%	100.0%
	\$9-12	12.5%	20.0%	25.0%	32.5%	40.0%	50.0%	62.5%	75.0%	87.5%
	\$ 6-9	0.0%	5.0%	10.0%	17.5%	25.0%	32.5%	40.0%	50.0%	62.5%
	\$ 4-6	0.0%	0.0%	0.0%	5.0%	10.0%	17.5%	25.0%	35.0%	45.0%
2006 Clinical Revenue (\$M)	<\$ 32	\$ 32	\$ 33.5	\$ 39	\$ 43	\$ 47	\$ 51	\$ 55	\$ 60	
CAGR		<50%	50-54%	55-59%	60-64%	65-69%	70-74%	75-79%	80-84%	85+%

3 YEAR COMPOUNDED ANNUAL GROWTH RATE (CAGR)
FOR CLINICAL MOLECULAR DIAGNOSTICS REVENUE

EXHIBIT A (CONT'D)

THIRD WAVE LONG TERM INCENTIVE MATRIX (1/1/04 - 12/31/06)

Payout as a Percent of Target

3 Year Quartile Ranking Total Shareholder Return vs. Peer Group	1st Quartile	25.0%	35.0%	40.0%	45.0%	50.0%	62.5%	75.0%	87.5%	100.0%
	2nd Quartile	12.5%	20.0%	25.0%	32.5%	40.0%	50.0%	62.5%	75.0%	87.5%
	3rd Quartile	0.0%	5.0%	10.0%	17.5%	25.0%	32.5%	40.0%	50.0%	62.5%
	4th Quartile	0.0%	0.0%	0.0%	5.0%	10.0%	16.5%	25.0%	35.0%	45.0%
		<\$ 32	\$ 32	\$ 33.5	\$ 39	\$ 43	\$ 47	\$ 51	\$ 55	\$ 60
2006 Clinical Revenue (\$M)										
CAGR		<50%	50-54%	55-59%	60-64%	65-69%	70-74%	75-79%	80-84%	85+%

3 YEAR COMPOUNDED ANNUAL GROWTH RATE (CAGR)
FOR CLINICAL MOLECULAR DIAGNOSTICS REVENUE

- CAGR for 2004-2006 period calculated on 2003 clinical revenue of \$9.5M.
- Peer group is targeted at 8 companies which would include GenProbe, Digene, Celera, Ventana, BioRad, Abbott, Roche, Bayer
- Total payout equals the combined total of the two matrix charts above. Maximum payout after properly combining the two matrix charts equals 200% of target award.

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THIRD WAVE TECHNOLOGIES, INC. LONG TERM INCENTIVE PLAN NO. 2

1. PLAN OBJECTIVE

The Third Wave Technologies, Inc. Long Term Incentive Plan (referred to as the "Plan") is designed to encourage results-oriented actions on the part of members of the executive management team and other key employees of Third Wave Technologies, Inc. (the "Company"). The Plan is intended to align closely financial rewards for the employees with the achievement of specific performance objectives by the Company. The Plan, as amended and restated effective as of January 1, 2005, provides as follows:

2. ELIGIBILITY

Members of the executive management team of the Company ("Tier 1 Employees") and other key employees of the Company ("Tier 2 Employees") are eligible to participate in the Plan. The Administrator (as defined in Section 3 below) shall select the Tier 1 Employees and Tier 2 Employees who may participate in the Plan (a "Participant").

3. ADMINISTRATION

(a) The Plan shall be administered by the Compensation Committee of the Company's Board of Directors (the "Administrator"). The Administrator may delegate its authority to administer the Plan to an individual or committee. The term "Administrator" shall mean the Compensation Committee or such individual or committee to which authority has been delegated.

(b) The Administrator shall have full power and authority to establish the rules and regulations relating to the Plan, to interpret the Plan and those rules and regulations, to select each Participant for the Plan, to determine the Participant's target award, performance goals and final award, to make all factual and other determinations in connection with the Plan, and to take all other actions necessary or appropriate for the proper administration of the Plan, including the delegation of such authority or power, where appropriate. The Administrator may adjust the performance goals to take into account corporate transactions that take into account new revenue associated with mergers and/or acquisitions or other corporate transactions in an equitable manner that does not make it more difficult for the Company to achieve the original performance goals.

(c) All powers of the Administrator shall be executed in its sole discretion, in the best interest of the Company, not as a fiduciary, and in keeping with the objectives of the Plan and need not be uniform as to similarly situated individuals. The Administrator's administration of the Plan, including all such rules and regulations, interpretations, selections, determinations, approvals, decisions, delegations, amendments, terminations, and other actions, shall be final and binding upon the Company and all employees of the Company, including each Participant and his or her respective beneficiary(ies).

4. TARGET AWARDS AND PERFORMANCE GOALS

(a) The Administrator shall establish for each Participant who completes and returns an enrollment agreement, in a form designated by the Administrator, a target award that shall be payable if and to the extent the Company attains the performance goals set by the Administrator for a specified performance period. The executed enrollment agreement shall constitute a Participant's consent to be subject to the terms of the Plan and to be bound by the authority of the Administrator as set forth in Section 3.

(i) Unless the Administrator determines otherwise, the target award for a Participant who is a Tier 1 Employee shall be an amount equal to four times the highest annual incentive target amount established for the Participant during the performance period under the Company's annual incentive plan applicable to the Participant.

(ii) Unless the Administrator determines otherwise, the target award for a Participant who is a Tier 2 Employee shall be an amount equal to three times the highest annual incentive target amount established for the Participant during the performance period under the Company's annual incentive plan applicable to the Participant.

(b) The Administrator shall establish the performance goals and related calculation matrices for each performance period and shall promptly provide this information to each Participant who is eligible for an award for that performance period. The performance goals are attached as Exhibit A and are hereby fully incorporated into and shall be considered as part of this Plan. Unless the Administrator determines otherwise, the performance goals shall be based upon (i) the Company's total shareholder return ranking as compared to its peer group, (ii) the Company's stock price growth, and (iii) the growth in the Company's Clinical Molecular Diagnostics revenue. The Administrator may adjust the performance goals as it deems appropriate to take into account corporate transactions or other extraordinary events that occur during the performance period.

(c) For the purposes of subsection (b), the Administrator shall have the discretion to determine which companies are included in the peer group. The Administrator may adjust the peer group from time to time as it deems appropriate, including by adding, deleting, or replacing companies, to take into account mergers and other changes in the companies comprising the peer group.

(d) Unless the Administrator determines otherwise, each performance period shall be a three-year period beginning on January 1, 2005 and ending on December 31, 2008.

5. CALCULATION OF INCENTIVE AWARDS

(a) At the end of the performance period, the Administrator shall determine for each participant whether and to what extent the performance goals have been met and the percentage of the target award that is earned. The Administrator shall rely upon the audited financial statements of the Company and its subsidiaries to determine whether and to what extent the performance goals are met.

(b) The Administrator shall compute each Participant's award for the performance period based upon the Company's achievement of the performance goals and the matrices set forth on Exhibit A. On or around March 15 of the year following the end of the applicable performance period, the Company shall credit each Participant's award to a book account established for the Participant. All amounts credited to a Participant's book account shall be administered according to the vesting provisions of Section 6 below.

(c) Participants must be employed on the last day of the applicable performance period to be eligible for an incentive award under the Plan, except as described below or except as the Administrator may otherwise determine.

(i) The beneficiary(ies) of a Participant who dies during a performance period shall receive a prorated award based upon the Company's performance at the end of such performance period. The prorated award shall be calculated from the commencement of the performance period, or, if applicable, such later date on which the Participant became eligible to participate for the performance period as established by the Administrator, to the date of the Participant's death. The Company shall pay the prorated award to the beneficiary(ies) after end of the performance period pursuant to Section 8 below.

(ii) Participants who retire on or after their normal retirement age (as defined below) during the performance period shall receive a prorated award based upon the Company's performance at the end of such performance period. The prorated award shall be calculated from the commencement of the performance period, or, if applicable, such later date on which the Participant became eligible to participate for the performance period as established by the Administrator, to the date of the Participant's normal retirement. The Company shall pay the prorated award to the Participant after the end of the performance period pursuant to Section 8 below. For purposes of this Plan, "normal retirement age" is age 65, or, if the Participant has at least five years of service, age 55.

(iii) Participants who become disabled (as defined below) during the performance period shall receive a prorated award based upon the Company's performance at the end of such performance period. The prorated award shall be calculated from the commencement of the performance period, or, if applicable, such later date on which the Participant became eligible to participate for the performance period as established by the Administrator, to the date the Participant is disabled. The Company shall pay the prorated award to the Participant after the end of the performance period pursuant to Section 8 below. For purposes of this Plan, "disabled" means eligible for long-term disability benefits as determined under a Company-sponsored disability plan.

(iv) Upon a Change in Control (as defined below) of the Company during the performance period, all performance goals pertaining to awards during such performance period shall be deemed to have been met 100 percent as of the effective date of the Change in Control and the maximum award for such performance period shall be deemed immediately earned, and such maximum award shall vest and be paid as described in Section 6(d); provided, however, that if the Change of Control is an acquisition or merger and such transaction occurs for less than \$200 million in total value, the Company shall not have been deemed to have met 100 percent as of the performance goals, rather the performance goals shall be measured by the Matrix in Exhibit

A as reconfigured to take into account a shortened period within which to achieve such targets by reducing the TWT Stock Price Column and 2007 Clinical Revenue Targets on a straight-line method based on the percentage of the performance period that has occurred. For example, if 1/2 of the performance period has expired, then the Stock Price and Clinical Revenue targets shall be revised based on 1/2 of the expected growth. The Company shall credit the maximum award to a book account established for the Participant as soon as practicable after the Change of Control.

For purposes of the Plan, the term "Change in Control" shall mean, and shall be deemed to have occurred if, (i) any "person" (as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended) or group acting in concert, other than a trustee or other fiduciary holding securities under an employee benefit plan of the Company acting in such capacity or a corporation owned directly or indirectly by the stockholders of the Company in substantially the same proportions as their ownership of stock of the Company, becomes the "beneficial owner" (as defined in Rule 13d-3 under said Act), directly or indirectly, of securities of the Company representing more than 50 percent of the total voting power represented by the Company's then outstanding voting securities; (ii) during any period of two consecutive years, individuals who at the beginning of such period constitute the Board of Directors of the Company and any new director whose election by the Board of Directors or nomination for election by the Company's stockholders was approved by a vote of at least two thirds (2/3) of the directors then still in office who either were directors at the beginning of the period or whose election or nomination for election was previously so approved, cease for any reason to constitute a majority thereof; (iii) consummation of a merger or consolidation of the Company with any other corporation other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) at least 80 percent of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation; (iv) the stockholders of the Company approve a plan of complete liquidation of the Company; or (v) the Company consummates a sale or disposition of (in one transaction or a series of related transactions) all or substantially all of its assets.

(d) In the event this Plan is terminated or suspended before the last day of a performance period, Participants who are employed by the Company on the day of such termination period shall receive an award based upon the Company's performance through the end of such performance period as if no such termination had occurred. The award shall be calculated from the commencement of the performance period, or, if applicable, such later date on which the Participant became eligible to participate for the performance period as established by the Administrator, to the end of the performance period. The Company shall credit the award to a book account established for the Participant as soon as practicable after the end of the performance period. Awards made pursuant to this subsection shall vest and be paid in accordance with the terms of the Plan as though the Plan had not been terminated or suspended.

(e) The Administrator may establish appropriate terms and conditions to accommodate newly hired and transferred employees. For example, upon a Participant's being designated to participate in the Plan, the Administrator may establish, in its discretion, the effective commencement date for such Participant for each performance period that has commenced but not then ended, and if such effective commencement date is established as a date later than the

commencement of a particular pending performance period, any award for that performance period may be prorated based on such later effective commencement date. Absent any action to the contrary, new employees that become Participants shall be entitled to a commencement date effective as of the beginning of the plan period.

6. VESTING OF INCENTIVE AWARDS

(a) If a Participant earns an award as described in Section 5 for a performance period, except as provided below in this Section 6, 25 percent of the award shall vest on the last day of the performance period, 50 percent of the award shall vest on the last day of the year following the end of such performance period, and the remaining 25 percent of the award shall vest on the last day of the second year following the end of such performance period, provided the Participant continues to be employed by the Company or an affiliate through such applicable vesting date.

(b) If a Participant retires at or after his or her normal retirement age, becomes disabled, or dies while employed by the Company, the Participant's award shall be fully vested at the end of the performance period or at the time such event occurs, whichever is later.

(c) Unless otherwise specified elsewhere in this agreement or any valid employment or other agreement between the Participant and the Company, if a Participant's employment with the Company and its affiliates terminates for any reason, any unvested award shall be forfeited to the Company as of his or her termination date.

(d) In the event of a Change in Control during any performance period, Participants who are employed by the Company on the effective date of the Change in Control shall be eligible to receive, and shall be deemed vested in, the maximum award payout for each such performance period as follows: (A) fifty percent (50%) of the maximum award payout shall be deemed vested and shall be paid upon the effective date of the Change in Control, and (B) fifty percent (50%) of the maximum award payout shall be deemed vested and shall be paid on the earliest date at either (x) six (6) months after the effective date of the Change in Control, (y) upon Participant's termination without Cause, or resignation for Good Reason (applicable only if "Good Reason" concept is defined in a valid employment agreement between Company and Participant), occurring prior to the six (6) month anniversary of the effective date of the Change in Control, or (z) the date on which such portion of the award would have vested in the absence of a Change in Control pursuant to Section 6(a) or (b) above. For purposes of the Plan, the term "Cause" shall mean any of the following grounds for termination of the Participant's employment:

(i) any willful refusal to perform essential job duties which continues for more than ten (10) days after notice from the Company;

(ii) any intentional act of fraud or embezzlement by the Employee in connection with the Employee's duties or committed in the course of Employee's employment;

(iii) any gross negligence or willful misconduct of the Employee with regard to the Company or any of its subsidiaries resulting in a material economic loss to the Company;

(iv) the Participant is convicted of a felony;

(v) the Participant is convicted of a misdemeanor the circumstances of which involve fraud, dishonesty or moral turpitude and which is substantially related to the circumstances of Participant's job with the Company;

(vi) any willful and material violation by the Employee of any statutory or common law duty of loyalty to the Company or any of its subsidiaries resulting in a material economic loss; or

(vii) any material breach by the Employee of his or her employment or non-compete agreements, if any exist.

For purposes of the Plan, the term "Good Reason" shall mean, and shall be deemed to have the meaning set forth in any valid employment agreement being Participant and Company.

(e) If a Participant earns an award as described in Section 5 for a performance period, and thereafter there is a Change in Control, Participants who are employed by the Company on the effective date of the Change in Control shall be eligible to receive, and shall be deemed vested in, the unvested portion of the award as of the effective date of the Change in Control as follows: (A) fifty percent (50%) of such unvested portion of the award shall be deemed immediately vested and shall be paid on the effective date of the Change in Control, and (B) fifty percent (50%) of such unvested portion of the award shall be deemed vested and shall be paid on the earliest date of (x) six (6) months after the effective date of the Change in Control, (y) upon the Participant's termination without Cause, or resignation for Good Reason, occurring prior to the six (6) month anniversary of the effective date of the Change in Control, or (z) the date on which such portion of the award would have vested in the absence of a Change in Control pursuant to Sections 6(a) or 6(b) above.

(f) A transfer of employment between the Company and an affiliate shall not be considered a termination of employment for purposes of the Plan.

(g) The Administrator reserves the right to accelerate vesting whenever the Administrator deems such action appropriate.

(h) Prior to a Change in Control, the Company shall deposit in a separate bank account sufficient funds to cover both the vested and unvested cumulative award amounts so that funding of vested awards can take place upon the Change in Control closing.

(i) In the event of a Change in Control whereby the Company's Compensation Committee of the Board of Directors no longer exists, the Administrator shall be deemed to be the individual who at the time of the Change of Control are the Company's General Counsel and principal financial officer.

7. CHANGES TO PERFORMANCE GOALS AND TARGET AWARDS

At any time prior to the final determination of awards pursuant to Section 5, the Administrator may adjust the performance goals and target awards to reflect a change in corporate capitalization (such as a stock split or stock dividend), or a corporate transaction (such as a merger, consolidation, separation, reorganization, or partial or complete liquidation), or to

reflect equitably the occurrence of any extraordinary event, any change in applicable accounting rules or principles, any change in the Company's method of accounting, any change in applicable law, any change due to any merger, consolidation, acquisition, reorganization, stock split, stock dividend, combination of shares, or other changes in the Company's corporate structure or shares, or any other change of a similar nature.

8. PAYMENT OF AWARDS

(a) Unless determined otherwise by the Administrator, a Participant may elect, in the manner specified by the Administrator, to receive payment of his or her award in (i) cash, (ii) shares of the Company's common stock valued as of the day that is five business days before the date of distribution, or (iii) a combination. Except as provided in subsection (b), payment shall be made as soon as administratively possible following the vesting of an award. Participants who elect to take a distribution of their award in the form of the Company's stock, rather than in cash, shall receive a 10 percent increase in the number of shares of the Company's stock otherwise to be distributed. The distribution of the Company's stock shall be made in accordance with the Third Wave Technologies, Inc. 2000 Stock Plan, pursuant to Section 11 of such plan, or the comparable provisions of any successor stock plan adopted by the Company.

(b) Unless the Administrator determines otherwise, a Participant who is eligible to participate in the Company's deferred compensation program, if one exists, may make an irrevocable written election to defer all or any part of the payment of such award pursuant to a separate deferred compensation arrangement sponsored by the Company.

(c) Subject to applicable state law and the notification to, or consent of, a Participant's spouse, as required, each Participant may designate a beneficiary or beneficiaries (which beneficiary may be an entity other than a natural person) to receive any payments which are to be made following the Participant's death. Such designation may be changed or canceled at any time without the consent of any such beneficiary but again subject to applicable state law and the notification to, or consent of, a Participant's spouse, as required. Any such designation, change, or cancellation must be made on a form approved by the Administrator and shall not be effective until received by the Administrator or its designee. If no beneficiary has been named, or the designated beneficiary or beneficiaries shall have predeceased the Participant, the beneficiary shall be the Participant's surviving spouse or, if none, the Participant's estate. If a Participant designates more than one beneficiary, the interests of such beneficiaries shall be paid in equal shares, unless the Participant has specifically designated otherwise.

9. AMENDMENTS AND TERMINATION

The Company may at any time amend, suspend, or terminate the Plan or any portion thereof; provided that no amendment that would adversely affect the rights of a Participant may take effect without such Participant's prior written consent. Notwithstanding the foregoing, the Company shall have the right to modify the terms of the Plan as may be necessary or desirable to comply with applicable laws.

10. MISCELLANEOUS PROVISIONS

(a) Neither the establishment of this Plan, nor any action taken hereunder, shall be construed as giving any Participant any right to be retained in the employ of the Company or any of its subsidiaries. Nothing in the Plan, and no action taken pursuant to the Plan, shall affect the right of the Company or a subsidiary to terminate a Participant's employment at any time and for any or no reason. The Company is under no obligation to continue the Plan. Notwithstanding the foregoing, the Company acknowledges that certain Participants may have separate employment or other agreements with the Company and those agreements may include terms and conditions affecting the terms and conditions of awards that may be made under this Plan.

(b) A Participant's right and interest under the Plan may not be assigned or transferred, except as provided in Section 5(c)(i) of the Plan upon death, and any attempted assignment or transfer shall be null and void and shall extinguish, in the Company's sole discretion, the Company's obligation under the Plan to pay award(s) with respect to the Participant. The Company's obligations under the Plan may be assigned to any corporation which acquires all or substantially all of the Company's assets or any corporation into which the Company may be merged or consolidated.

(c) The Plan shall be unfunded. The Company shall not be required to establish any special or separate fund, or to make any other segregation of assets, to assure payment of awards. The Company's obligations hereunder shall constitute a general, unsecured obligation of the Company, and awards shall be paid solely from the Company's general assets. No Participant shall have any right to any specific assets of the Company.

(d) The Company shall have the right to deduct from awards any and all federal, state, and local taxes or other amounts required by law to be withheld.

(e) The Company's obligation to pay compensation as herein provided is subject to any applicable orders, rules, or regulations of any government agency or office having authority to regulate the payment of wages, salaries, and other forms of compensation.

(f) The validity, construction, interpretation, and effect of the Plan shall exclusively be governed by and determined in accordance with the laws of the State of Wisconsin.

EXHIBIT A

THIRD WAVE LONG TERM INCENTIVE MATRIX - 2 (1/1/05 - 12/31/07)

Payout as a Percent of Target (Target = 4x target bonus for Tier 1; 3x target bonus for Tier 2)

	>\$14	25.0%	35.0%	40.0%	45.0%	50.0%	62.5%	75.0%	87.5%	100.0%
TWT STOCK PRICE	\$11-14	12.5%	20.0%	25.0%	32.5%	40.0%	50.0%	62.5%	75.0%	87.5%
	\$ 8-11	0.0%	5.0%	10.0%	17.5%	25.0%	32.5%	40.0%	50.0%	62.5%
	\$ 6-8	0.0%	0.0%	0.0%	5.0%	10.0%	17.5%	25.0%	35.0%	45.0%
2007 CLINICAL REVENUE (\$M)	<\$ 48	\$ 48	\$52.3	\$64.4	\$ 71	\$ 80	\$89.3	\$99.0	\$111.0	
CAGR		<47%	47.3%	51.6%	62.5%	67.8%	74.6%	81.1%	87.5%	94.7%

3 YEAR COMPOUNDED ANNUAL GROWTH RATE (CAGR)
FOR CLINICAL MOLECULAR DIAGNOSTICS REVENUE

THIRD WAVE LONG TERM INCENTIVE MATRIX - 2 (1/1/05 - 12/31/07)

Payout as a Percent of Target (Target = 4x target bonus for Tier 1; 3x target bonus for Tier 2)

	1(st) Quartile	25.0%	35.0%	40.0%	45.0%	50.0%	62.5%	75.0%	87.5%	100.0%
3 Year Quartile Ranking Total Shareholder Return vs. Peer Group	2(nd) Quartile	12.5%	20.0%	25.0%	32.5%	40.0%	50.0%	62.5%	75.0%	87.5%
	3(rd) Quartile	0.0%	5.0%	10.0%	17.5%	25.0%	32.5%	40.0%	50.0%	62.5%
	4(th) Quartile	0.0%	0.0%	0.0%	5.0%	10.0%	17.5%	25.0%	35.0%	45.0%
2007 Clinical Revenue (\$M)		<\$ 48	\$ 48	\$52.3	\$64.4	\$ 71	\$ 80	\$89.3	\$99.0	\$111.0
CAGR		<47%	47.3%	51.6%	62.5%	67.8%	74.6%	81.1%	87.5%	94.7%

3 YEAR COMPOUNDED ANNUAL GROWTH RATE (CAGR)
FOR CLINICAL MOLECULAR DIAGNOSTICS REVENUE

- CAGR for three-year period calculated on 2004 clinical revenue of \$15M.
- Peer group is targeted at 8 companies which would include GenProbe, Digene, Celera, Ventana, BioRad, Abbott, Roche, Bayer

Total payout equals the combined total of the two matrix charts above. Maximum payout after properly combining the two matrix charts equals 200% of target award.

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October 19, 2004

John Comerford
7755 Summerfield Drive
Verona, WI 53593

Dear John:

Third Wave Technologies, Inc. (TWT), is terminating your employment effective November 1, 2004. In consideration of the services you have provided to TWT during your employment, your agreement with and commitment to the obligations in the transition plan in the attached Agreement, and your agreement to the terms of the attached Agreement, TWT will pay you eight (8) months of severance at a rate of \$18,750 per month. If you agree to its terms after you have read and considered the Agreement that follows, please sign it in the space provided at the end of the Agreement and return it to TWT. Please note that Section 8 of the Agreement requires you to represent that, up until the time you sign this Agreement and as part of this Agreement, you have not and agree that you will not (1) violate your confidentiality obligations described in Section 5 of this Agreement, (2) made or make disparaging comments or remarks about TWT or about any of the Releasees as described in Section 6 of the Agreement, or (3) discussed or disclosed the terms of this Agreement with any person outside of TWT Senior Management, except for your immediate family members, personal attorney, or financial advisor consulted in connection with a review of the Agreement as described in Section 7 of the Agreement. Also, the Agreement will be null and void if any handwritten changes are made to it. If you have any questions about this or any other provision, please call me at 608-273-8933.

AGREEMENT

1. TRANSITION PERIOD. You agree that the transition period for your orderly departure from TWT will commence today, and will conclude November 1, 2004 ("Transition Period"). You agree you will come to the work site as requested and make yourself available to work during the Transition Period. During the Transition Period that TWT will make severance payments to you, and assuming you do not commence a new full-time job, you agree to provide up to eight (8) hours per week of consulting at the request of Kevin Conroy.

2. SEVERANCE PAY. If you agree to the terms described in this letter (the "Agreement"), and if you have satisfied all of your obligations hereunder and you have satisfied your obligations during the Transition Period, TWT will begin paying you, effective November 1, 2004, severance in the pre-tax amount of \$150,000 (\$9,375/paycheck * 2 paychecks/month * 8 months) (the "Payment"). Subject to Section 4 and 5 below, this Payment will be payable in installments on TWT's regular payroll dates until the amount has been paid in full. Each installment of the Payment will occur in the amount stated above each payroll period, except that the final installment may be adjusted so that the total Payment equals \$150,000. Each portion of the Payment will be subject to deductions for income and payroll taxes. The period during which you continue to receive the Payment is the "Payment Period."

If you receive compensation from any other employer or if you receive fees for any consulting services, you are required to notify TWT immediately. Failure to notify TWT, could jeopardize the benefits received by you in this Agreement and TWT, in its sole discretion may terminate further Payment and other considerations immediately. TWT reserves the right to terminate immediately any future Payments and other considerations following receipt of notice of compensation from another employer or fees for any consulting services; provided, however, that in any case, TWT will pay three (3) months severance payments following your notice, unless fewer than three (3) payments remain due, in which case TWT will pay you just those remaining. TWT assumes you will cooperate with John Puisis and others as designated during the transition period and that you will comply with the terms of your Agreement with TWT. Failure to comply with the above mentioned could jeopardize the Payment and benefits received by you in this Agreement.

If you have not secured a new position by the end of the eight month Payment Period, provided you have complied with this Agreement, TWT is open to discussing the possibility of extending the Payment Period.

You understand that TWT has offered you this Agreement with the intent that you will not receive unemployment compensation until after the Payment Period ends and you agree not to apply for unemployment benefits until after the Payment Period ends. TWT agrees it will not affirmatively challenge your entitlement to unemployment compensation benefits after the Payment Period ends.

TWT will, on your termination date, pay you \$5,000 for outplacement services. TWT will payout 100% of your accrued and unused PTO balance.

3. SPECIAL EQUITY. TWT will, at its discretion, provide a special equity privilege whereby if you are deemed by TWT to cooperate and support the best interests of TWT, then TWT will give you accelerated vesting on select unvested stock options as identified in the attached Exhibit A, which is incorporated herein by this reference. Options on the accelerated vesting schedule, as identified on Exhibit A, will vest 12 months after the termination date or on November 1, 2005, and may be exercised within two years upon vesting. Additionally, for stock options already vested on the termination date, TWT will provide an extended exercise date beyond the ninety (90) day limitation up to two years from the termination date of November 1, 2004. TWT may revoke extended exercise provisions provided within this Section at any time at TWT's sole discretion for your failure, in TWT's sole judgment, to act in accordance with your obligations hereunder or to act in the best interests of TWT. In the event of such revocation, you will receive written notice from TWT and you will be able to exercise only those options that were vested per their original vesting schedule as of November 1, 2004 provided such exercise is completed within ninety (90) calendar days of the date of TWT's notice of revocation.

4. RELEASE OF CLAIMS. In exchange for the Payment and other consideration described in this Agreement, you agree--for yourself, your heirs, your beneficiaries and all other representatives--to waive and release and, with this Agreement, you do waive and release all past or present claims of any nature against TWT. Further, you agree not to institute or cause to be instituted in any state or federal court any such action or claim. This waiver and release of claims applies to any claims against TWT or anyone associated with or representing TWT--including, but not limited to, its officers, directors, partners, employees, attorneys, or agents (the "Releasees").

a. Claims Released. The claims you are waiving in exchange for the Payment and other consideration described in this Agreement include, but are not limited to, claims under federal, state or local law including but not limited to, the Civil Rights Act of 1964, as amended; the Family Medical Leave Act, the Americans with Disabilities Act; the Wisconsin Fair Employment Practices Act and if applicable, the Age Discrimination in Employment Act, for discrimination of any kind, tort, breach of contract, wrongful discharge, lost wages, compensatory damages, punitive damages, attorneys' fees, and all other claims of any type or nature, whether known or unknown, matured or unmatured, direct or indirect. Other claims you are waiving are those that relate to ownership of any intellectual property or trade secrets developed during the term of your employment. You acknowledge if you have lab books that your notebooks and those of individuals who have worked for or with you are complete and you acknowledge that all intellectual property and trade secrets conceived or developed by you during the term of your employment are solely the property of TWT.

b. Your Representation and Waiver. You represent that you have not filed any such action or claim in any court or before any state, federal or other governmental agency. You forever waive any right to recover money damages or any

other form of relief for any and all claims waived under this Agreement. You further agree to waive your rights to and not accept any benefits, which might be conferred upon you in any administrative court or other legal proceeding concerning any claim released by this Section 4. You understand and agree that this release forever bars you from suing, arbitrating or otherwise asserting a claim against TWT on any released claim.

c. ADEA Release and Waiver. In exchange for the amounts paid to you under this Agreement, you specifically waive any claims you may have under the Age Discrimination in Employment Act of 1967, the Older Workers Benefit Protection Act, or any similar law. You are not waiving any rights or claims that may arise after the date of this Agreement. You further acknowledge that you have been advised by this writing (i) to consult with an attorney prior to executing this Agreement; (ii) that you have up to twenty-one (21) days to review this Agreement and to decide whether to accept it;

d. Consideration for the Release of Claims. You acknowledge that the Payment and any other consideration TWT has agreed to give under this Agreement are benefits to which you would not have been entitled if you did not sign this Agreement and that TWT has agreed to provide the consideration only if you sign this Agreement and give up the claims described in it.

5. YOUR CONTINUING OBLIGATIONS.

a. Your Employee Agreement with Third Wave Technologies, Inc. With Respect to Confidential Information and Invention Assignment ("Employment Agreement") dated August 9, 2004 is hereby incorporated by reference and any provision of said Agreement not superceded by a specific provision of this Agreement shall remain in effect and be binding on the parties with respect to your post employment obligations. A copy is included with this letter Agreement.

b. Confidentiality: You acknowledge and agree that while employed at TWT you have been privy to substantial confidential business and technology information relating to TWT and its business as well as current and potential business partners and third parties in both commercial as well as academic organizations, some of which is extremely sensitive and proprietary. You expressly covenant as follows:

(i) You agree that you have not and will not disclose to others or use any Trade Secret owned or possessed by TWT or any other Releasee, or that any Trade Secret that was created by you or anyone related to TWT, or was disclosed to you, whether you have such Trade Secret in your memory or embodied in writing or other physical form, for as long as the information remains a Trade Secret. "Trade Secret" means all information which derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means, by other persons who can obtain economic or personal value from its disclosure or use and is subject to TWT's or any other Releasee's efforts to maintain its secrecy that are reasonable under the circumstances.

(ii) In addition to the foregoing, you agree not disclose or use for (2) years following your termination date any Confidential Information which is possessed by or developed for TWT which relates to TWT's existing or potential business or technology, and either was created by you or was disclosed to you. Confidential Information is information or technology, product development plans or strategies, market adoption plans and business plans that are generally not known to the public and which information or technology TWT seeks to protect from disclosure to its existing or potential competitors or others, including, without limitation, for example: non-public business plans, strategies, existing or proposed bids, costs, technical and engineering developments, existing or proposed research or development projects, financial or business projections, marketing plans, investments, negotiation strategies, and information received by TWT from others which TWT has an obligation to treat as confidential.

You understand your obligations under this Section apply to, and are intended to prevent, the direct or indirect disclosure of Confidential Information to others where such disclosure of Confidential Information would reasonably be considered to be useful to TWT's competitors or to a third party to become a competitor based in whole or in part on such disclosure of Confidential Information.

(iii) You acknowledge that damages for the violation of this Section entitled "Confidentiality" will be inadequate and will not give full sufficient relief to TWT, and that a breach of this Section will constitute irreparable harm to TWT. Therefore, you agree that in the event of any violation of any covenant contained in this Section, TWT shall be entitled to injunctive relief against the continued violation thereof in any court (federal or state) located in Dane County, Wisconsin.

Such remedy, however, shall be cumulative and nonexclusive and shall be in addition to any other remedy to which TWT may be entitled.

6. NON-DISPARAGEMENT. You agree that you will refrain from making disparaging comments or remarks about TWT or about or to any of the Releasees, except that you may provide truthful information about TWT or the Releasees to the extent required by law.

7. NON-DISCLOSURE. You agree not to disclose the terms of this Agreement to any person outside of TWT Senior Management, except for your immediate family members, attorney, or financial advisor consulted in connection with review of this Agreement. You assure us that no family member, attorney, or financial advisor will disclose the terms of this Agreement to any other person except as required by law.

8. VIOLATION OF THIS AGREEMENT. You represent that up until the time you sign this Agreement, you have not violated your Employment Agreement, the confidentiality obligations described in Section 5 above, made disparaging comments or remarks about TWT or about any of the Releasees as described in Section 6 above, or discussed or disclosed the existence or terms of this Agreement as described in Section

7 above. Any exceptions to this representation must be disclosed by you in writing to TWT on or before the final execution of this Agreement with sufficient detail to allow TWT to fully understand such action.

In the event that TWT finds that the representation in the previous sentence is inaccurate or untrue, or if you violate the provisions or your Employment Agreement or this Agreement hereof, you agree that TWT will be entitled to immediately stop paying the Payments and revoke any other benefits received under this Agreement to which you are otherwise entitled under this Agreement and TWT will have no further obligation to continue any payments. In addition, should TWT determine that a violation of this Agreement or the Employment Agreement has occurred, TWT will be entitled to a complete recovery of all Payments previously made during the Payment Period. Finally, at any time, TWT may pursue whatever other legal remedies are available to it including, but not limited to, the right to seek temporary and permanent injunctions, which you agree are appropriate additional remedies to prevent irreparable harm to the Company in the event of a breach of this Agreement or your Employment Agreement.

9. NON-SOLICITATION. You acknowledge and confirm that you continue to be bound by section seven (7) of your Employee Agreement with Third Wave Technologies, Inc. with Respect to Confidential Information and Invention dated August 9, 2004 regarding non-solicitation of employees. In addition, you shall not, prior to the expiration of one (1) year following the end of the Payment Period, solicit, encourage or otherwise aid any employee of TWT to leave TWT for the purpose of becoming associated in any manner whatsoever with any business with which you intend to be or are then associated in any manner whatsoever. You further agree you shall not, prior to the expiration of one (1) year following Payment Period solicit, encourage or otherwise induce any suppliers, collaborators, customers or third parties, with whom TWT has established relationships to discontinue their relationships with TWT.

10. ACCEPTANCE PROCEDURES. TWT wishes to ensure that you voluntarily agree to the terms contained in this document and do so only after you fully understand them. Accordingly, the following procedures will apply:

a. You may accept this document's terms by signing and dating it and returning the signed and dated document so that it is postmarked or faxed to TWT on or before the twenty first (21st) day following your receipt of this document. The signed and dated document must be directed to Katie Zingg, Director of Human Resources, in an envelope marked "Personal and Confidential" at Third Wave Technologies, Inc., 502 South Rosa Road, Madison, WI 53719.

b. You will have seven (7) calendar days from the date you sign this Agreement in which to withdraw or revoke your acceptance (the "Revocation Period"). If you choose to revoke your acceptance, you must do so in writing, and the written notice must be received before the end of the first regular business day following the Revocation Period by Katie Zingg, Director of Human Resources, in an envelope marked "Personal and Confidential" at Third Wave Technologies, Inc., 502 South Rosa Road,

Madison, WI 53719. In the event you take any steps to revoke your acceptance during the revocation period, this Agreement shall be null and void.

c. TWT ENCOURAGES YOU TO REVIEW THIS DOCUMENT WITH AN ATTORNEY PRIOR TO SIGNING IT.

11. MISCELLANEOUS. Should you accept this Agreement, its terms will be governed by the following:

a. Except as provided in Section 3 above, this document constitutes the complete understanding between you and TWT concerning all matters affecting your employment with TWT and the termination of that employment. If you accept this Agreement, it supersedes all prior agreements, understandings and practices concerning such matters, including, but not limited to, any TWT personnel documents, handbooks, or policies and any prior customs or practices of TWT except for your Employment Agreement.

b. Nothing in the releases contained in this Agreement should be construed as an admission of wrongdoing or liability on the part of either TWT or you. Both of us deny any liability to the other.

c. This Agreement and its interpretation will be governed and construed in accordance with the laws of Wisconsin and will be binding upon the parties to the Agreement and their respective successors and assigns.

d. Each provision of this Agreement is severable and intended to be construed independently. The unenforceability of any provision shall not affect the validity or enforceability of any other provision.

e. You represent and warrant that you have read and understand all terms of this Agreement, executed knowingly and voluntarily with full knowledge of its significance and with the intent to be bound by it. You represent and warrant that you

October 19, 2004
John Comerford
Page 8 of 8

have been or have the opportunity to be represented by legal counsel of your choice in connection with this agreement who has explained it and advised that it is a legally binding contract. This Agreement contains the entire Agreement between TWT and you and the terms of the Agreement cannot be modified except in writing signed by both TWT and you.

Very truly yours,

THIRD WAVE TECHNOLOGIES

By: /s/ John Puisis

John Puisis
President & Chief Executive Officer

I agree with and accept the terms contained in this document and agree to be bound by them.

Dated this 25th day of October, 2004.

/s/ John Comerford

John Comerford

John Comerford
Exhibit A

Total vested options as of termination date = 189,100
Number of options under two-year exercise period = 40,000

GRANT DATE	STOCK OPTIONS		# OPTIONS VESTED ON 11/1/04	OPTIONS UNDER ACCELERATED VESTING		
	# OPTIONS	GRANT PRICE		GRANT DATE	# OPTIONS	GRANT PRICE
9/11/2000	30,000	\$8.78	30,000	9/11/2000	0	\$8.78
10/3/2000	9,600	\$8.78	9,600	10/3/2000	0	\$8.78
6/12/2001	81,000	\$11.00	60,750	6/12/2001	0	\$11.00
6/12/2002	140,000	\$2.13	70,000	6/12/2002	10,000	\$2.13
7/17/2003	75,000	\$4.00	18,750	7/17/2003	30,000	\$4.00
2/25/2004	16,500	\$3.37	0	2/25/2004	0	\$3.37
Totals	352,100		189,100		40,000	

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October 20, 2004

Dave Nuti
5764 Auburn Drive
Madison, WI 53711

Dear Dave:

The following are the terms of an agreement between you and Third Wave Technologies, Inc.

AGREEMENT

1. TRANSITION PERIOD.

a. You agree that you will continue serving as TWT's Chief Financial Officer through the end of business October 29, 2004, and that, without limiting the foregoing, you will participate in TWT's earnings call scheduled for October 27, 2004 and if completed, sign required lawful and appropriate SEC filings for TWT's third quarter financial results by October 29, 2004. Effective October 30, 2004, you will cease serving as TWT's Chief Financial Officer. TWT agrees that it will pay you 100% of your accrued and unused PTO through October 31, 2004 in your pay check for the period ending October 31, 2004. You will not accrue additional PTO after October 30, 2004.

b. You agree that the transition period for your orderly departure from TWT will commence October 30, 2004, and will conclude December 31, 2004 ("Transition Period"), subject to termination of the Transition Period after October 30, 2004 and prior to December 31, 2004 if you start a new job during that period. During the Transition Period, you will be employed as a full-time financial advisor to TWT with respect to non-forward-looking financial data. You agree you will come to the work site and make yourself available to work during the Transition Period, as directed by John Puisis or his designee, on financial advisory projects specified by John Puisis or his designee consistent with the prior sentence. You will be paid your current salary of \$220,000 per year on a prorata basis during the Transition Period, to be paid in accordance with TWT's regular payroll schedule and less all deductions currently in place and for taxes required by law. Your existing benefits will continue through December 31, 2004 (unless you obtain alternative employment and terminate the Transition Period earlier).

2. SEVERANCE PAY. TWT will pay you non-cancelable severance payments for six (6) months in the pre-tax amount of \$15,000 per month (\$7,500/paycheck * 2 paychecks/month * 6 months). Non-cancelable severance payments will commence on the earlier of (i) January 1, 2005 or (ii) the date between October 30, 2004 and December 31, 2004 that you terminate the Transition Period as a result of you starting a new job, and will end six months thereafter (the "Severance Period"). Subject to Paragraph 4 below, severance will be payable in installments on TWT's regular payroll dates. Each installment will occur in the amount stated above each payroll period. Each severance payment will be subject to deductions for income and payroll taxes. You understand that TWT has made this offer with the intent that you will not receive unemployment compensation until after the Severance Period ends and you agree not to apply for unemployment benefits until after the Severance Period ends. TWT agrees it will not affirmatively challenge your entitlement to unemployment compensation benefits after the Severance Period ends.

TWT may, in its sole discretion, elect to make cancelable severance payments for an additional six (6) months commencing on July 1, 2005 or at the end of the six (6) month severance period, if you have not secured alternative employment by that date. Any such payments shall not be deemed to extend the "Severance Period" for purposes of TWT's obligation to pay family health and dental insurance premiums as described in the immediately following paragraph.

TWT also agrees to pay 100% of the insurance premiums for family health and dental coverage during the Severance Period, subject to the same insurance policy co-payments currently in place, if you elect continuation coverage through TWT's group health policy pursuant to COBRA (the "Insurance Payment"). You are responsible for paying the premiums for any insurance coverage for you or your family after the Severance Period for health and dental, whether through TWT's group health policy pursuant to COBRA continuation rights or through any other employer or individual plan. You understand that your COBRA continuation rights begin on the first day of the Severance Period for health and dental insurance, even though TWT agrees to pay the premiums through the end of the Severance Period for health and dental insurance. You agree that TWT will in no way be responsible for damages resulting from any lapse in such coverage.

3. SPECIAL EQUITY. TWT will give you accelerated vesting on select unvested stock options as identified in the attached Exhibit A, which is incorporated herein by this reference. Additionally, for stock options already vested on October 30, 2004, TWT will provide an extended exercise date beyond the ninety (90) day limitation up to two years from October 30, 2004. The 10,000 options on the accelerated vesting schedule, as identified on Exhibit A, will vest on October 30, 2004, and may be exercised within two years upon vesting. Except for the 10,000 options, TWT may revoke extended exercise provisions provided within this paragraph at any time at TWT's sole discretion for your failure, in TWT's sole judgment, to act in accordance with your obligations hereunder or to act in the best interests of TWT. In the event of such revocation, you will receive written notice from TWT and you will be able to exercise only those options that were vested per their original vesting schedule as of October 30, 2004 provided such exercise is completed within ninety (90) calendar days of the date of TWT's notice of revocation. You agree that you will not trade any TWT security in violation of any insider trading laws.

4. RELEASE OF CLAIMS. In exchange for the severance payments and other consideration described in this Agreement, you agree--for yourself, your heirs, your beneficiaries and all other representatives--to waive and release and, with this Agreement, you do waive and release all past or present claims of any nature against TWT. Further, you agree not to institute or cause to be instituted in any state or federal court any such action or claim. This waiver and release of claims applies to any claims against TWT or anyone associated with or representing TWT--including, but not limited to, its officers, directors, partners, employees, attorneys, or agents (the "Releasees").

a. Claims Released. The claims you are waiving in exchange for the payments and other consideration described in this Agreement include, but are not limited to, claims under federal, state or local law including but not limited to, the Civil Rights Act of 1964, as amended; the Family Medical Leave Act, the Americans with Disabilities Act; the Wisconsin Fair Employment Practices Act and if applicable, the Age Discrimination in Employment Act, for discrimination of any kind, tort, breach of contract, wrongful discharge, lost wages, compensatory damages, punitive damages, attorneys' fees, and all other claims of any type or nature, whether known or unknown, matured or unmatured, direct or indirect. Other claims you

are waiving are those that relate to ownership of any intellectual property or trade secrets developed during the term of your employment. You acknowledge your lab books and those of individuals who have worked for or with you are complete and you acknowledge that all intellectual property and trade secrets conceived or developed by you during the term of your employment are solely the property of TWT.

b. Your Representation and Waiver. You represent that you have not filed any such action or claim in any court or before any state, federal or other governmental agency. You forever waive any right to recover money damages or any other form of relief for any and all claims waived under this Agreement. You further agree to waive your rights to and not accept any benefits which might be conferred upon you in any administrative court or other legal proceeding concerning any claim released by this Paragraph 4. You understand and agree that this release forever bars you from suing, arbitrating or otherwise asserting a claim against TWT on any released claim.

c. ADEA Release and Waiver. In exchange for the amounts paid to you under this Agreement, you specifically waive any claims you may have under the Age Discrimination in Employment Act of 1967, the Older Workers Benefit Protection Act, or any similar law. You are not waiving any rights or claims that may arise after the date of this Agreement. You further acknowledge that you have been advised by this writing (i) to consult with an attorney prior to executing this Agreement; (ii) that you have up to twenty-one (21) days to review this Agreement and to decide whether to accept it; (iii) that you have seven (7) days after signing it to cancel and revoke this Agreement; and (iv) that this Agreement will not become effective until the seven-day time period has passed. If you give notice of revocation before the end of the seven (7) day period, this Agreement will become null and void. TWT is not required to provide any portion of any payment or other benefit described in the Agreement before the seven-day time period has passed.

d. Consideration for the Release of Claims. You acknowledge that the payments and other consideration TWT has agreed to give under this Agreement are benefits to which you would not have been entitled if you did not sign this Agreement and that TWT has agreed to provide the consideration only if you sign this Agreement and give up the claims described in it.

5. YOUR CONTINUING OBLIGATIONS.

a. Your Employment Agreement dated April 10, 2002 is hereby incorporated by reference and any provision of said Agreement not superceded by a specific provision of this Agreement shall remain in effect and be binding on the parties with respect to your post employment obligations. A copy is included with this Agreement.

b. You agree, in exchange for severance payments, Insurance Payment, and special equity described in Paragraph 3 to substitute the following in place of the arbitration and confidentiality provisions of the Employment Agreement:

Arbitration: You further acknowledge and agree that the parties may enforce the terms of this Agreement in state or federal court in Dane County, Wisconsin. You expressly consent to jurisdiction in Dane County, Wisconsin to resolve any controversy involving this Agreement.

Confidentiality: You acknowledge and agree that while employed at TWT you have been privy to substantial confidential business, financial and technology information relating to TWT and its business as well as current and potential business partners and third parties in both commercial as well as academic organizations, some of which is extremely sensitive and proprietary. You expressly covenant as follows:

(i) You agree that you have not and will not disclose to others or use any Trade Secret owned or possessed by TWT or any other Releasee, or that any Trade Secret that was created by you or anyone related to TWT, or was disclosed to you, whether you have such Trade Secret in your memory or embodied in writing or other physical form, for as long as the information remains a Trade Secret. "Trade Secret" means all information which derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means, by other persons who can obtain economic or personal value from its disclosure or use and is subject to TWT's or any other Releasee's efforts to maintain its secrecy that are reasonable under the circumstances.

(ii) In addition to the foregoing, you agree not to disclose or use between the date of this Agreement and two (2) years following the end of the Transition Period any Confidential Information which is possessed by or developed for TWT which relates to TWT's existing or potential business or technology, and either was created by you or was disclosed to you. Confidential Information is information or technology, product development plans or strategies, market adoption plans and business plans that are generally not known to the public and which information or technology TWT seeks to protect from disclosure to its existing or potential competitors or others, including, without limitation, for example: non-public business plans, strategies, existing or proposed bids, costs, technical and engineering developments, existing or proposed research or development projects, financial or business projections, marketing plans, investments, negotiation strategies, and information received by TWT from others which TWT has an obligation to treat as confidential.

You understand your obligations under this paragraph apply to, and are intended to prevent, the direct or indirect disclosure of Confidential Information to others where such disclosure of Confidential Information would reasonably be considered to be useful to TWT's competitors or to a third party to become a competitor based in whole or in part on such disclosure of Confidential Information.

(iii) You acknowledge that damages for the violation of this paragraph entitled "Confidentiality" will be inadequate and will not give full sufficient relief to TWT, and that a breach of this paragraph will constitute irreparable harm to TWT. Therefore, you agree that in the event of any violation of any covenant contained in this Paragraph, TWT shall be entitled to injunctive relief against the continued violation thereof in any court (federal or state) located in Dane County, Wisconsin.

Such remedy, however, shall be cumulative and nonexclusive and shall be in addition to any other remedy to which TWT may be entitled.

6. NON-DISPARAGEMENT. You agree that you will refrain from making disparaging comments or remarks about TWT or about or to any of the Releasees, except that you may provide truthful information about TWT or the Releasees to the extent required by law.

TWT agrees that it will refrain from making disparaging comments or remarks about you, except that TWT may provide truthful information about you to the extent required by law.

7. NON-DISCLOSURE. You agree not to disclose the terms of this Agreement to any person except for your immediate family members, attorney, or financial advisor consulted in connection with review of this Agreement. You assure us that no family member, attorney, or financial advisor will disclose the terms of this Agreement to any other person except as required by law.

TWT agrees not to disclose the terms of this Agreement to any person except for its officers, directors, attorneys, accountants and other professional advisors, and except to the extent disclosure may be required, or deemed advisable in the opinion of TWT's attorneys, under applicable laws, rules or regulations, including without limitation federal or state securities laws, rules or regulations. TWT assures you that no officer, director, attorney, accountant or other professional advisor will disclose the terms of this Agreement to any other person except as required by law.

8. REPRESENTATIONS AND WARRANTIES. You represent and warrant that to the best of your actual knowledge: (i) up until the time you sign this Agreement, you have not violated your legal obligations relating to TWT or the confidentiality obligations described in Paragraph 5 above, made disparaging comments or remarks about TWT or about any of the Releasees as described in Paragraph 6 above, or discussed or disclosed the existence or terms of this Agreement as described in Paragraph 7 above; (ii) you are not aware of any actual, alleged or suspected accounting issues, violations, or improprieties relating to TWT that could have a material adverse effect on TWT; and (iii) you are not aware of any actual, alleged or suspected (x) violation of any law, rule or regulation (including without limitation securities laws, rules or regulations, the Sarbanes-Oxley Act, or any regulation promulgated thereunder), (y) violation of any applicable securities exchange listing requirement, or (z) violation of any TWT rule, regulation, policy or code (including without limitation the TWT Code of Business Conduct), by TWT or any of its directors, officers, employees or representatives that could have a material adverse effect on TWT. Any exceptions to this representation must be disclosed by you in writing to TWT on or before the final execution of this Agreement with sufficient detail to allow TWT to fully understand such action. In addition, you agree that if you become aware during the Transition Period or the Severance Period of any matter described in Section 8(ii) or (iii), you will immediately report such matter to an executive officer of TWT.

In the event that TWT finds that the any representation or warranty set forth in the previous paragraph is inaccurate or untrue, or if you violate the provisions or your Employment Agreement or Paragraphs 1, 2, 3, 4, 5, 6, 7,8 or 9 hereof, you agree that TWT will be entitled to immediately stop paying the cancelable severance payments and Insurance Payment and revoke any other benefits received under this Agreement to which you are otherwise entitled under this Agreement and TWT will have no further obligation to continue any payments. In addition, should TWT determine that a violation of Paragraphs 1, 2, 3, 4, 5, 6, 7,8 or 9 hereof or the Employment Agreement has occurred, TWT will be entitled to a complete recovery of all cancelable severance payments and Insurance Payment previously made during the Severance Period. Finally, at any time, TWT may pursue whatever other legal remedies are available to it including, but not limited to, the right to seek temporary and permanent injunctions, which you agree are appropriate additional remedies to prevent irreparable harm to the Company in the event of a breach of this Agreement or your Employment Agreement.

IN THE EVENT TWT FINDS YOU HAVE BREACHED ANY OBLIGATIONS HEREUNDER, YOU AGREE TO IMMEDIATELY TENDER BACK TO TWT ALL CANCELABLE SEVERANCE AND BENEFITS PAID AS WELL AS THE NET VALUE OF THE 10,000 STOCK OPTIONS ISSUED TO YOU AS PART OF THIS AGREEMENT, PROVIDED THEY HAVE BEEN EXERCISED.

9. NON-SOLICITATION. You acknowledge and confirm that you continue to be bound by section 7 of your Employment Agreement dated April 10, 2002 regarding non-solicitation of employees. In addition, you shall not, prior to the expiration of one (1) year following the expiration of the Severance Period, solicit, encourage or otherwise aid any employee of TWT to leave TWT for the purpose of becoming associated in any manner whatsoever with any business with which you intend to be or are then associated in any manner whatsoever. You further agree you shall not, prior to the expiration of one (1) year following the expiration of the Severance Period, solicit, encourage or otherwise induce any suppliers, collaborators, customers or third parties, with whom TWT has established relationships to discontinue their relationships with TWT.

10. ACCEPTANCE PROCEDURES. TWT wishes to ensure that you voluntarily agree to the terms contained in this document and do so only after you fully understand them. Accordingly, the following procedures will apply:

a. You may accept this document's terms by signing and dating it and returning the signed and dated document so that it is postmarked or faxed to TWT on or before the twenty first (21st) day following your receipt of this document. The signed and dated document must be directed to Katie Zingg, Director of Human Resources, in an envelope marked "Personal and Confidential" at Third Wave Technologies, Inc., 502 South Rosa Road, Madison, WI 53719.

b. You will have seven (7) calendar days from the date you sign this Agreement in which to withdraw or revoke your acceptance (the "Revocation Period"). If you choose to revoke your acceptance, you must do so in writing, and the written notice must be received before the end of the first regular business day following the Revocation Period by Katie Zingg, Director of Human Resources, in an envelope marked "Personal and Confidential" at Third Wave Technologies, Inc., 502 South Rosa Road, Madison, WI 53719. In the event you take any steps to revoke your acceptance during the revocation period, this Agreement shall be null and void.

c. TWT ENCOURAGES YOU TO REVIEW THIS DOCUMENT WITH AN ATTORNEY PRIOR TO SIGNING IT.

11. MISCELLANEOUS. Should you accept this Agreement, its terms will be governed by the following:

a. Except as provided in Paragraph 5 above, this document constitutes the complete understanding between you and TWT concerning all matters affecting your employment with TWT and the termination of that employment. If you accept this Agreement, it supersedes all prior agreements, understandings and practices concerning such matters, including, but not limited to, any TWT personnel documents, handbooks, or policies and any prior customs or practices of TWT except for your Employment Agreement.

b. Nothing in the releases contained in this Agreement should be construed as an admission of wrongdoing or liability on the part of either TWT or you. Both of us deny any liability to the other.

c. This Agreement and its interpretation will be governed and construed in accordance with the laws of Wisconsin and will be binding upon the parties to the Agreement and their respective successors and assigns.

d. Each provision of this Agreement is severable and intended to be construed independently. The unenforceability of any provision shall not affect the validity or enforceability of any other provision.

You represent and warrant that you have read and understand all terms of this Agreement, executed knowingly and voluntarily with full knowledge of its significance and with the intent to be bound by it. You represent and warrant that you have been or have the opportunity to be represented by legal counsel of your choice in connection with this agreement who has explained it and advised that it is a legally binding contract. This Agreement contains the entire Agreement between TWT and you and the terms of the Agreement cannot be modified except in writing signed by both TWT and you.

Very truly yours,

THIRD WAVE TECHNOLOGIES

By: /s/ John J. Puisis

John J. Puisis
Chief Executive Officer

I agree with and accept the terms contained in this document and agree to be bound by them.

Dated this 20th day of October, 2004. /s/ David M. Nuti

Dave Nuti

Exhibit A

DAVE NUTI

Number of options for
which vesting is
accelerated to
October 31, 2004 =
10,000

GRANT DATE	# OPTIONS	GRANT PRICE	# OPTIONS VESTED ON 10/31/04	OPTIONS UNDER ACCELERATED VESTING		
				GRANT DATE	# OPTIONS	GRANT PRICE
4/22/2002	20,000	\$ 4.10	10,000			
10/8/2002	20,000	\$ 1.40	10,000	10/8/2002	10,000	\$ 1.40
1/3/2003	40,000	\$ 2.64	10,000			\$ 2.64
4/28/2003	50,000	\$ 3.97	12,500			\$ 3.97
7/17/2003	120,000	\$ 4.00	30,000			
2/24/2004	16,133	\$ 3.37	0	**	**	**
	-----	-----	-----	-----	-----	-----
TOTAL	266,133		72,500		10,000	

October 21, 2004

David Nuti
5764 Auburn Drive
Madison, WI 53711

Re: Amendment to Separation Letter Agreement

Dear Dave:

In consideration for your assistance to Third Wave Technologies in your transition through December 2004, you will receive 20,000 additional stock options at a \$2.64 strike price, to vest on October 31, 2004 with a 2-year exercise period. Such assistance will include occasional phone conversations, not to exceed ten hours per month, that do not impede any other employment.

Sincerely,

/s/ John Puisis

John Puisis
Chief Executive Officer

Accepted and Agreed:

/s/ David Nuti

David Nuti

</TEXT>
</DOCUMENT>

EMPLOYMENT AGREEMENT

THIS EMPLOYMENT AGREEMENT ("Agreement") is entered into as of the 14th day of March 2005, by and between Kevin T. Conroy ("Employee") and THIRD WAVE TECHNOLOGIES, INC., a Delaware corporation (the "Company").

WHEREAS, the Company desires to employ Employee as its Vice President, General Counsel & Secretary, and Employee desires to accept such employment pursuant to the terms and conditions set forth in this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and conditions hereinafter set forth, and other good and valuable consideration, receipt of which is hereby acknowledged, the parties agree as follows:

1. Employment. The Company hereby agrees to employ Employee as its Vice President, General Counsel & Secretary and Employee hereby agrees to serve the Company in such position, all subject to the terms and provisions of this Agreement. Employee agrees (a) to devote his full-time professional efforts, attention and energies to the business of the Company, and (b) to perform such reasonable responsibilities and duties customarily attendant to the position of Vice President, General Counsel & Secretary. Nothing in this Agreement will prevent Employee from engaging in additional activities in connection with (i) serving on corporate, civic and charitable boards and committees, (ii) delivering lectures and fulfilling speaking engagements, (iii) managing personal investments; and (iv) engaging in charitable activities and community affairs.

2. Term of Employment. Employee's employment will continue until terminated as provided in Section 6 below (the "Employment Term").

3. Compensation. During the Employment Term, Employee shall receive the following compensation.

3.1 Base Salary. Employee's annual base salary on the date of this Agreement is \$225,000.00, payable in accordance with the normal payroll practices of the Company ("Base Salary"). Employee's Base Salary will be subject to annual review by the Compensation Committee and the Board of Directors of the Company. During the Employment Term, on each anniversary date of this Agreement, the Company shall review the Base Salary amount to determine any increases. In no event shall the Base Salary be less than the Base Salary amount for the immediately preceding twelve (12) month period other than as permitted in Section 6.1(c) hereunder.

3.2 Annual Bonus Compensation. Employee shall be eligible to receive an annual cash bonus as determined by the Company's CEO and approved by the Compensation Committee in its sole discretion each calendar year. Employee's target annual bonus percentage that he is eligible to earn for each calendar year shall be forty percent (40%) of his Base Salary as of January 1 of the applicable new calendar year. Any such bonus shall be based upon the compensation principles of the Company in effect at the time the CEO determines and the Compensation Committee approves the amount of any bonus to be awarded, and except as set forth in Section 7 hereof, Employee shall not be entitled to receive an annual bonus for any

calendar year (including the bonus referenced above) unless he remains employed with the Company through December 31 of the applicable calendar year; provided, however, that if Employee is terminated with Cause or resigns without Good Reason, no bonus will be due.

3.3 Long Term Incentive Plan. Employee shall participate in the Company's Long Term Incentive Plans ("LTIP") and shall be deemed a "Tier 1 Employee" thereunder. Employee's benefits under the LTIP shall be determined pursuant to the terms of the LTIP, and such benefits may not be terminated or diminished without the written consent of the Employee.

3.4 Equity Incentives and Other Long Term Compensation. The Company upon the approval of the Compensation Committee, may grant Employee from time to time options to purchase shares of the Company's common stock, or other form of equity, both as a reward for past individual and corporate performance, and as an incentive for future performance. Such options, if awarded, will be pursuant to the Company's then current stock option plan. All options granted to Employee shall vest in equal installments over the four-year period commencing with the date of grant of such options, subject to the acceleration of vesting (i) as described in Section 7.1(d) and 7.2(b) hereof and (ii) as may be set forth in the option grant agreements issued by the Company, as amended, provided, that in the event of a conflict between any option grant agreement and this Agreement, this Agreement shall control.

4. Benefits.

4.1 Benefits. Employee will be entitled to participate in the sick leave, insurance (including medical, life and long-term disability), profit-sharing, retirement, and other benefit programs that are generally provided to employees of the Company similarly situated, all in accordance with the rules and policies of the Company as to such matters and the plans established therefore.

4.2 Vacation and Personal Time. The Company will provide Employee with four (4) weeks of paid vacation each calendar year Employee is employed by the Company, in accordance with Company policy. The foregoing vacation days shall be in addition to standard paid holiday days for employees of the Company.

4.3 Indemnification. To the fullest extent permitted by applicable law and as provided for in the Company's articles of incorporation and bylaws in effect as of the date of this Agreement, the Company will, during and after termination of employment, indemnify Employee (including providing advancement of expenses) for any judgments, fines, amounts paid in settlement and reasonable expenses, including attorneys' fees, incurred by Employee in connection with the defense of any lawsuit or other claim or investigation to which Employee is made, or threatened to be made, a party or witness by reason of being or having been an officer, director or employee of the Company or any of its subsidiaries or affiliates as defined under the Securities and Exchange Act of 1934 ("Affiliates") or a fiduciary of any of their benefit plans.

4.4 Liability Insurance. Both during and after termination (for any reason) of Employee's employment, the Company shall cause Employee to be covered under a directors and officers' liability insurance policy for his acts (or non-acts) as an officer or director of the Company or any of its Affiliates. Such policy shall be maintained by the Company, at its expense, in an amount and on terms (including the time period of coverage after the Employee's

employment terminates) at least as favorable to the Employee as policies covering the Company's Board of Directors.

5. Business Expenses. Upon submission of a satisfactory accounting by Employee, consistent with current policies of the Company, the Company will reimburse Employee for any out-of-pocket expenses reasonably incurred by Employee in the furtherance of the business of the Company.

6. Termination.

6.1 By Employee.

(a) Without Good Reason. Employee may terminate his employment pursuant to this Agreement at any time without Good Reason (as defined below) with at least ten (10) business days' written notice (the "Employee Notice Period") to the Company. Upon termination by Employee under this section, the Company may, in its sole discretion and at any time during the Employee Notice Period, suspend Employee's duties for the remainder of the Employee Notice Period, as long as the Company continues to pay compensation to Employee, including benefits, throughout the Employee Notice Period.

(b) With Good Reason. Employee may terminate his employment pursuant to this Agreement with Good Reason (as defined below) at any time within ninety (90) days after the occurrence of an event constituting Good Reason.

(c) Good Reason. "Good Reason" shall mean any of the following: (i) Employee's Base Salary is reduced in a manner that is not applied proportionately to other senior executive officers of the Company, provided any such reduction shall not exceed thirty percent (30%) of Employee's then current Base Salary; (ii) Employee's duties, authority or responsibilities are materially reduced or are materially inconsistent with the scope of authority, duties and responsibilities of Employee's position; (iii) the occurrence of a material breach by the Company of any of its obligations to Employee under this Agreement or (iv) the Company materially violates or continues to materially violate any law or regulation contrary to the written advice of Employee and the Company's outside counsel to both the CEO and the Board of Directors and the Company fails to rectify such violation within thirty (30) days of the written advice that such violations are taking place.

6.2. By the Company.

(a) With Cause. The Company may terminate Employee's employment pursuant to this Agreement for Cause, as defined below, immediately upon written notice to Employee.

(b) Cause. "Cause" shall mean any of the following:

- (i) any willful refusal to perform essential job duties which continues for more than ten (10) days after notice from the Company;

(ii) any intentional act of fraud or embezzlement by the Employee in connection with the Employee's duties or committed in the course of Employee's employment;

(iii) any gross negligence or willful misconduct of the Employee with regard to the Company or any of its subsidiaries resulting in a material economic loss to the Company;

(iv) the Participant is convicted of a felony;

(v) the Participant is convicted of a misdemeanor the circumstances of which involve fraud, dishonesty or moral turpitude and which is substantially related to the circumstances of Participant's job with the Company;

(iv) any willful and material violation by the Employee of any statutory or common law duty of loyalty to the Company or any of its subsidiaries resulting in a material economic loss; or

(v) any material breach by the Employee of this Agreement or any of the Agreements referenced in Section 8 of this Agreement.

(c) Without Cause. Subject to Section 7.1, the Company may terminate Employee's employment pursuant to this Agreement without Cause upon at least thirty days' written notice ("Company Notice Period") to Employee. Upon any termination by the Company under this Section 6.2(c), the Company may, in its sole discretion and at any time during the Company Notice Period, suspend Employee's duties for the remainder of the Company Notice Period, as long as the Company continues to pay compensation to Employee, including benefits, throughout the Company Notice Period.

6.3 Death or Disability. Notwithstanding Section 2, in the event of the death or Disability (defined herein) of Employee during the Employment Term, Employee's employment and this Agreement shall immediately and automatically terminate and the Company shall pay Employee (or in the case of death, Employee's designated beneficiary) Base Salary, accrued, unpaid bonuses, in each case up to the date of termination. Neither Employee, his beneficiary nor estate shall be entitled to any severance benefits set forth in Section 7 if terminated pursuant to this section. For purposes of this Agreement, "Disability" shall mean any physical incapacity or mental incompetence as a result of which Employee is unable to perform the essential functions of his job for an aggregate of more than six (6) months during any twelve-month period. Employee acknowledges and agrees that given the nature of Employee's position with the Company it would cause the Company to suffer an undue hardship if required to retain Employee beyond the six (6) month period if Employee remains unable to perform the essential functions of his job, with or without a reasonable accommodation.

6.4 Survival. The agreement described in Section 8 hereof and attached hereto as Schedule A shall survive the termination of this Agreement.

7. Severance and Other Rights Relating to Termination and Change of Control.

7.1 Termination of Agreement Pursuant to Section 6.1(b) or 6.2(c). If the Employee terminates his employment for Good Reason pursuant to Section 6.1(b), or the Company terminates Employee's employment without Cause pursuant to Section 6.2(c), subject to the conditions described in Section 7.3 below, the Company will provide Employee the following payments and other benefits:

(a) The Company shall immediately pay to Employee a lump-sum amount equal to the sum of (i) twelve (12) months of Employee's then current Base Salary, (ii) any accrued but unpaid Base Salary as of the termination date; and (iii) shall pay Employee any accrued but unpaid bonus as of the termination date, on the same terms and at the same times as would have applied had Employee's employment not terminated; provided, that, if such termination occurs on or within the one year period following a Change of Control (as defined in Section 7.2(a)), the Company shall also pay to Employee a pro rata portion of his target bonus.

(b) If Employee elects COBRA coverage for health and/or dental insurance in a timely manner, the Company shall pay the monthly premium payments for such timely elected coverage when each premium is due until the earlier of: (i) twelve months from the date of termination; (ii) the date Employee obtains new employment which offers health and/or dental insurance that is reasonably comparable to that offered by the Company; or (iii) the date COBRA continuation coverage would otherwise terminate in accordance with the provisions of COBRA. Thereafter, health and dental insurance coverage shall be continued only to the extent required by COBRA and only to the extent Employee timely pays the premium payments himself.

(c) The Company shall provide Employee an outplacement consulting package up to a maximum value of Ten Thousand Dollars (\$10,000), which shall be selected at the sole discretion of the Employee. Any payments made for such outplacement consulting shall be made by the Company directly to the consulting company.

(d) Employee will receive any awards under the LTIP that are earned (as defined in any LTIP document), whether vested or unvested, as of the termination date, on terms and at the times set forth in the LTIP.

(e) Fifty percent (50%) percent of stock options granted to Employee shall immediately become fully vested and exercisable upon such termination or resignation. Executive will be entitled to exercise such stock options in accordance with Section 7.7.

7.2 Change of Control. The Board of Directors of the Company has determined that it is in the best interests of the Company and its stockholders to assure that the Company will have the continued dedication of the Employee, notwithstanding the possibility, threat or occurrence of a Change of Control (defined in Section 7.2(a) below). The Board believes it is imperative to diminish the inevitable distraction of the Employee by virtue of the personal uncertainties and risks created by a pending or threatened Change of Control and to encourage the

Employee's full attention and dedication to the Company currently and in the event of any threatened or pending Change of Control, and to provide the Employee with compensation and benefits arrangements upon a Change of Control which ensure that the compensation and benefits expectations of the Employee will be satisfied and which are competitive with those of other similarly-situated companies. Therefore, in order to accomplish these objectives, the Board has caused the Company to include the provisions set forth in this Section 7.2.

(a) Change of Control. "Change of Control" shall mean, and shall be deemed to have occurred if, on or after the date of this Agreement, (i) any "person" (as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended) or group acting in concert, other than a trustee or other fiduciary holding securities under an employee benefit plan of the Company acting in such capacity or a corporation owned directly or indirectly by the stockholders of the Company in substantially the same proportions as their ownership of stock of the Company, becomes the "beneficial owner" (as defined in Rule 13d-3 under said Act), directly or indirectly, of securities of the Company representing more than 50% of the total voting power represented by the Company's then outstanding Voting Securities, (ii) during any period of two consecutive years, individuals who at the beginning of such period constitute the Board of Directors of the Company and any new director whose election by the Board of Directors or nomination for election by the Company's stockholders was approved by a vote of at least two thirds (2/3) of the directors then still in office who either were directors at the beginning of the period or whose election or nomination for election was previously so approved, cease for any reason to constitute a majority thereof, (iii) the stockholders of the Company approve a merger or consolidation of the Company with any other corporation other than a merger or consolidation which would result in the Voting Securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into Voting Securities of the surviving entity) at least 80% of the total voting power represented by the Voting Securities of the Company or such surviving entity outstanding immediately after such merger or consolidation, or (iv) the stockholders of the Company approve a plan of complete liquidation of the Company or an agreement for the sale or disposition by the Company of (in one transaction or a series of related transactions) all or substantially all of the Company's assets.

(b) Acceleration of Vesting of Stock Options. Vesting of stock options granted to Employee shall be accelerated upon any Change of Control to the extent set forth in the applicable stock option agreement(s) between the Company and Employee. Employee will be entitled to exercise such stock options in accordance with such option agreements.

(c) LTIP Awards. Any awards granted to Employee under the LTIP as of the Change of Control shall be treated as described in the LTIP.

(d) If, within six (6) months before or after the effective date of a Change of Control, the Employee terminates his employment for Good Reason pursuant to Section 6.1(b) or the Company terminates Employee's employment without Cause pursuant to Section 6.2(c), subject to the conditions described in Section 7.3 below, the termination shall be treated for purposes of Section 7.2(b) and (c) as if it occurred on the effective date of the Change of Control.

(e) Payments and benefits that trigger Sections 280G and 4999 of the Internal Revenue Code of 1986, as amended, will be reduced to the extent necessary so that no excise tax would be imposed if doing so would result in the employee retaining a larger after-tax amount, taking into account the income, excise and employment taxes imposed on the payments and benefits.

7.3 Conditions Precedent to Payment of Severance. The Company's obligations to Employee described in Sections 7.1 and 7.2 are contingent on Employee's delivery to the Company of his signed waiver and release, in the form attached hereto as Exhibit 7.3, of all claims he may have against the Company up to the date of the termination of his employment with the Company, and (if applicable) his not revoking such release. Moreover, the Employee's rights to receive payments and benefits pursuant to Sections 7.1 and 7.2 are conditioned on the Employee's ongoing compliance with his obligations as described in Section 8 hereof. Any cessation by the Company of any such payments and benefits shall be in addition to, and not in lieu of, any and all other remedies available to the Company for Employee's breach of his obligations described in Section 8 hereof.

7.4 No Severance Benefits. Employee is not entitled to any severance benefits if this Agreement is terminated pursuant to Sections 6.1(a) or 6.2(a) of this Agreement; provided however, Employee shall be entitled to (i) Base Salary prorated through the effective date of such termination; (ii) Bonuses for which the payment date occurs prior to the effective date of such termination; and (iii) medical coverage and other benefits required by law and plans (as provided in Section 7.6, below).

7.5 Benefits Required by Law and Plans; Vacation Time Pay. In the event of the termination of Employee's employment, Employee will be entitled to medical and other insurance coverage, if any, as is required by law and, to the extent not inconsistent with this Agreement, to receive such additional benefits as Employee may be entitled under the express terms of applicable benefit plans (other than bonus or severance plans) of the Company, its subsidiaries and Affiliates.

7.6 Exercise Period of Stock Options after Termination. Unless it would subject the employee to adverse tax consequences under Section 885 of the recently enacted American Jobs Creation Act of 2004, Pub. Law No. 108-357, 118 Stat. 1418 (the Act), added ss. 409A to the Internal Revenue Code (Code), notwithstanding anything contained herein or in the option grant agreements to the contrary, in the event of Employee's termination after his first anniversary with the Company, Employee's vested stock options shall be open for exercise until the earlier of (i) two years from the date of termination or (ii) the latest date on which those options expire or are eligible to be exercised under the option grant agreements, determined without regard to such termination or resignation; provided further that such extended exercise period shall not apply in the event the Employee resigns without Good Reason or is terminated by the Company for Cause, in which case, the exercise periods shall continue to be governed by the terms of the option grant agreements.

8. Restrictions.

8.1 The Confidential Information Agreement. Simultaneously with the execution of this Agreement, Employee will sign the Employee Agreement with Respect to Confidential Information, Invention Assignment and Arbitration attached hereto as Schedule A (the "Confidential Information Agreement").

8.2 Agreement Not to Compete. In consideration for all of the payments and benefits that may become due to Employee under this Agreement, Employee agrees that for a period of twelve (12) months after termination of his employment for any reason, he will not, directly or indirectly, without the Company's prior written consent, (a) perform for a Competing Entity in any Restricted Area any of the same services or substantially the same services that he performed for the Company; (b) in any Restricted Area, advise, assist, participate in, perform services for, or consult with a Competing Entity regarding the management, operations, business or financial strategy, marketing or sales functions or products of the Competing Entity (the activities in clauses (a) and (b) collectively are, the "Restricted Activities"); or (c) solicit or divert the business of any Restricted Customer. Employee acknowledges that in his position with the Company he has had and will have access to knowledge of confidential information about all aspects of the Company that would be of significant value to the Company's competitors.

8.3 Additional Definitions.

(a) Customer. "Customer" means any individual or entity for whom the Company has provided services or products or made a proposal to perform services or provide products.

(b) Restricted Customer. "Restricted Customer" means any Customer with whom/which Employee had contact on behalf of the Company during the 12 months preceding the end, for whatever reason, of his employment.

(c) Competing Entity. "Competing Entity" means any business entity engaged in the development, design, manufacture, marketing, distribution or sale of molecular diagnostics.

(d) Restricted Area. "Restricted Area" means any geographic location where if Employee were to perform any Restricted Activities for a Competing Entity in such a location, the effect of such performance would be competitive to the Company.

8.4 Reasonable Restrictions on Competition Are Necessary. Employee acknowledges that reasonable restrictions on competition are necessary to protect the interests of the Company. Employee also acknowledges that he has certain skills necessary to the success of the Company, and that the Company has provided and will provide to him certain confidential information that it would not otherwise provide because he has agreed not to compete with the business of the Company as set forth in this Agreement.

8.5 Restrictions Against Solicitations. Employee further covenants and agrees that during Employee's employment by the Company and for a period of twelve months following the termination of his employment with the Company for any reason, he will not, except with the prior consent of the Company's Chief Executive Officer, directly or indirectly, solicit or hire, or encourage the solicitation or hiring of, any person who is an employee of the Company for any

position as an employee, independent contractor, consultant or otherwise, provided that the foregoing shall not prevent Employee from serving as a reference.

8.6 Affiliates. For purposes of this Section 8, the term "Company" will be deemed to include the Company and its Affiliates.

8.7 Ability to Obtain Other Employment. Employee hereby represents that his experience and capabilities are such that in the event his employment with the Company is terminated, he will be able to obtain employment if he so chooses during the period of non-competition following the termination of employment described above without violating the terms of this Agreement, and that the enforcement of this Agreement by injunction, as described below, will not prevent him from becoming so employed.

8.8 Injunctive Relief. Employee understands and agrees that if he violates any provision of this Section 8, then in any suit that the Company may bring for that violation, an order may be made enjoining him from such violation, and an order to that effect may be made pending litigation or as a final determination of the litigation. Employee further agrees that the Company's application for an injunction will be without prejudice to any other right of action that may accrue to the Company by reason of the breach of this Section 8.

8.9 Section 8 Survives Termination. The provisions of this Section 8 will survive termination of this Agreement.

8.10 Condition of Payments. The provisions of this Section 8 regarding the restrictions on Employee shall be conditioned on Company making the payments to Employee as contemplated by Section 7.1 above. If Employee is terminated due to a disability pursuant to Section 6.3 or if Employee voluntarily resigns without Good Reason, in which case Employee will not be eligible to receive the severance payments set forth in Section 7.1, Employee shall not be bound by the agreement not to compete in Section 8.2. Employee, will, however, remain bound at all times by the Confidential Information Agreement and the restriction on solicitation in Section 8.5.

9. Arbitration. Unless other arrangements are agreed to by Employee and the Company, any disputes arising under or in connection with this Agreement, other than a dispute in which the primary relief sought is an equitable remedy such as an injunction, will be resolved by binding arbitration to be conducted pursuant to the Agreement for Arbitration Procedure of Certain Employment Disputes attached as Schedule B hereof.

10. Assignments; Transfers; Effect of Merger. No rights or obligations of the Company under this Agreement may be assigned or transferred by the Company except that such rights or obligations may be assigned or transferred pursuant to a merger or consolidation, or pursuant to the sale or transfer of all or substantially all of the assets of the Company, provided that the assignee or transferee is the successor to all or substantially all of the assets of the Company. This Agreement will not be terminated by any merger, consolidation or transfer of assets of the Company referred to above. In the event of any such merger, consolidation or transfer of assets, the provisions of this Agreement will be binding upon the surviving or resulting corporation or the person or entity to which such assets are transferred. The Company agrees that concurrently with any merger, consolidation or transfer of assets referred to above, it will cause any successor or transferee unconditionally to assume, either contractually or as a matter of law, all of the obligations of the Company hereunder in a writing promptly delivered to

the Employee. This Agreement will inure to the benefit of, and be enforceable by or against, Employee or Employee's personal or legal representatives, executors, administrators, successors, heirs, distributees, designees and legatees. None of Employee's rights or obligations under this Agreement may be assigned or transferred by Employee other than Employee's rights to compensation and benefits, which may be transferred only by will or operation of law. If Employee should die while any amounts or benefits have been accrued by Employee but not yet paid as of the date of Employee's death and which would be payable to Employee hereunder had Employee continued to live, all such amounts and benefits unless otherwise provided herein will be paid or provided in accordance with the terms of this Agreement to such person or persons appointed in writing by Employee to receive such amounts or, if no such person is so appointed, to Employee's estate.

11. No Set-off, No Mitigation Required. Except as expressly provided otherwise in this Agreement, the obligation of the Company to make any payments provided for hereunder and otherwise to perform its obligations hereunder will not be affected by any set-off, counterclaim, recoupment, defense or other claim, right or action which the Company may have against Employee or others. In no event will Employee be obligated to seek other employment or take other action by way of mitigation of the amounts payable to Employee under any of the provisions of this Agreement, and such amounts will not be reduced (except as otherwise specifically provided herein) whether or not Employee obtains other employment.

12. Taxes. The Company shall have the right to deduct from any payments made pursuant to this Agreement any and all federal, state, and local taxes or other amounts required by law to be withheld.

13. Miscellaneous. No amendment, modification or waiver of any provisions of this Agreement or consent to any departure thereof shall be effective unless in writing signed by the party against whom it is sought to be enforced. This Agreement contains the entire Agreement that exists between Employee and the Company with respect to the subjects herein contained and replaces and supercedes all prior agreements, oral or written, between the Company and Employee with respect to the subjects herein contained. Nothing herein shall affect any terms in the Confidential Information Agreement, the Noncompetition Agreement, the LTIP, and any stock option plans or agreements between Employee and the Company now and hereafter in effect from time to time. If any provision of this Agreement is held for any reason to be unenforceable, the remainder of this Agreement shall remain in full force and effect. Each section is intended to be a severable and independent section within this Agreement. The headings in this Agreement are intended solely for convenience of reference and shall be given no effect in the construction or interpretation of this Agreement. This Agreement is made in the State of Wisconsin and shall be governed by and construed in accordance with the laws of said State. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument. All notices and all other communications provided for in this Agreement shall be in writing and shall be considered duly given upon personal delivery, delivery by nationally reputable overnight courier, or on the third business day after mailing from within the United States by first class certified or registered mail, return receipt requested, postage prepaid, all addressed to the address set forth below each party's signature. Any party may change its address by furnishing notice of its new address to the other party in writing in accordance herewith, except that any notice of change of address shall be effective only upon receipt.

The parties hereto have executed this Employment Agreement as of the date first written above.

/s/ Kevin T. Conroy

Kevin T. Conroy ("Employee")

Notice Address:
4059 N. Richland Ct.
Shorewood, WI 53211

THIRD WAVE TECHNOLOGIES, INC. ("Company")

By: /s/ John J. PUISIS

John J. PUISIS, President and CEO

Notice Address:
502 South Rosa Road
Madison, Wisconsin 53719-1256
Attn: Chief Executive Officer

EMPLOYMENT AGREEMENT

THIS EMPLOYMENT AGREEMENT ("Agreement") is entered into as of the 14th day of March 2005, by and between James J. Herrmann ("Employee") and THIRD WAVE TECHNOLOGIES, INC., a Delaware corporation (the "Company").

WHEREAS, the Company desires to employ Employee as its Vice President, Finance and Principal Financial Officer and Employee desires to accept such employment pursuant to the terms and conditions set forth in this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and conditions hereinafter set forth, and other good and valuable consideration, receipt of which is hereby acknowledged, the parties agree as follows:

1. Employment. The Company hereby agrees to employ Employee as its Vice President, Finance and Principal Financial Officer and Employee hereby agrees to serve the Company in such position, all subject to the terms and provisions of this Agreement. Employee agrees (a) to devote his full-time professional efforts, attention and energies to the business of the Company, and (b) to perform such reasonable responsibilities and duties customarily attendant to the position of Vice President, Finance and Principal Financial Officer. Nothing in this Agreement will prevent Employee from engaging in additional activities in connection with (i) serving on corporate, civic and charitable boards and committees, (ii) delivering lectures and fulfilling speaking engagements, (iii) managing personal investments; and (iv) engaging in charitable activities and community affairs.

2. Term of Employment. Employee's employment will continue until terminated as provided in Section 6 below (the "Employment Term").

3. Compensation. During the Employment Term, Employee shall receive the following compensation.

3.1 Base Salary. Employee's annual base salary on the date of this Agreement is \$190,000, payable in accordance with the normal payroll practices of the Company ("Base Salary"). Employee's Base Salary will be subject to annual review by the Compensation Committee and the Board of Directors of the Company. During the Employment Term, on each anniversary date of this Agreement, the Company shall review the Base Salary amount to determine any increases. In no event shall the Base Salary be less than the Base Salary amount for the immediately preceding twelve (12) month period other than as permitted in Section 6.1(c) hereunder.

3.2 Annual Bonus Compensation. Employee shall be eligible to receive an annual cash bonus as determined by the Company's CEO and approved by the Compensation Committee in its sole discretion each calendar year. Employee's target annual bonus percentage that he is eligible to earn for each calendar year shall be thirty-five percent (35%) of his Base Salary as of January 1 of the applicable new calendar year. Any such bonus shall be based upon the compensation principles of the Company in effect at the time the CEO determines and the Compensation Committee approves the amount of any bonus to be awarded, and except as set forth in Section 7 hereof, Employee shall not be entitled to receive an annual bonus for any calendar year (including the bonus referenced above) unless he remains employed with the Company through December 31 of the applicable calendar year; provided, however, that if Employee is terminated with Cause or resigns without Good Reason, no bonus will be due.

3.3 Long Term Incentive Plan. Employee shall participate in the Company's Long Term Incentive Plans ("LTIP") and shall be deemed a "Tier 1 Employee" thereunder. Employee's benefits under the LTIP shall be determined pursuant to the terms of the LTIP, and such benefits may not be terminated or diminished without the written consent of the Employee.

3.4 Equity Incentives and Other Long Term Compensation. The Company, upon the approval of the Compensation Committee, may grant Employee from time to time options to purchase shares of the Company's common stock, or other forms of equity, both as a reward for past individual and corporate performance, and as an incentive for future performance. Such options, if awarded, will be pursuant to the Company's then current stock option plan. All options granted to Employee shall vest in equal installments over the four-year period commencing with the date of grant of such options, subject to the acceleration of vesting (i) as described in Section 7.1(d) and 7.2(b) hereof and (ii) as may be set forth in the option grant agreements issued by the Company, as amended, provided, that in the event of a conflict between any option grant agreement and this Agreement, this Agreement shall control.

4. Benefits.

4.1 Benefits. Employee will be entitled to participate in the sick leave, insurance (including medical, life and long-term disability), profit-sharing, retirement, and other benefit programs that are generally provided to employees of the Company similarly situated, all in accordance with the rules and policies of the Company as to such matters and the plans established therefore.

4.2 Vacation and Personal Time. The Company will provide Employee with four (4) weeks of paid vacation each calendar year Employee is employed by the Company, in accordance with Company policy. The foregoing vacation days shall be in addition to standard paid holiday days for employees of the Company.

4.3 Indemnification. To the fullest extent permitted by applicable law and as provided for in the Company's articles of incorporation and bylaws in effect as of the date of this Agreement, the Company will, during and after termination of employment, indemnify Employee (including providing advancement of expenses) for any judgments, fines, amounts paid in settlement and reasonable expenses, including attorneys' fees, incurred by Employee in connection with the defense of any lawsuit or other claim or investigation to which Employee is made, or threatened to be made, a party or witness by reason of being or having been an officer, director or employee of the Company or any of its subsidiaries or affiliates as defined under the Securities and Exchange Act of 1934 ("Affiliates") or a fiduciary of any of their benefit plans.

4.4 Liability Insurance. Both during and after termination (for any reason) of Employee's employment, the Company shall cause Employee to be covered under a directors and officers' liability insurance policy for his acts (or non-acts) as an officer or director of the Company or any of its Affiliates. Such policy shall be maintained by the Company, at its expense, in an amount and on terms (including the time period of coverage after the Employee's employment terminates) at least as favorable to the Employee as policies covering the Company's Board of Directors.

5. Business Expenses. Upon submission of a satisfactory accounting by Employee, consistent with current policies of the Company, the Company will reimburse Employee for any out-of-pocket expenses reasonably incurred by Employee in the furtherance of the business of the Company.

6. Termination.

6.1 By Employee.

(a) Without Good Reason. Employee may terminate his employment pursuant to this Agreement at any time without Good Reason (as defined below) with at least ten (10) business days' written notice (the "Employee Notice Period") to the Company. Upon termination by Employee under this section, the Company may, in its sole discretion and at any time during the Employee Notice Period, suspend Employee's duties for the remainder of the Employee Notice Period, as long as the Company continues to pay compensation to Employee, including benefits, throughout the Employee Notice Period.

(b) With Good Reason. Employee may terminate his employment pursuant to this Agreement with Good Reason (as defined below) at any time within ninety (90) days after the occurrence of an event constituting Good Reason.

(c) Good Reason. "Good Reason" shall mean any of the following: (i) Employee's Base Salary is reduced in a manner that is not applied proportionately to other senior executive officers of the Company, provided any such reduction shall not exceed thirty percent (30%) of Employee's then current Base Salary; (ii) Employee's duties, authority or responsibilities are materially reduced or are materially inconsistent with the scope of authority, duties and responsibilities of Employee's position; or (iii) the occurrence of a material breach by the Company of any of its obligations to Employee under this Agreement.

6.2. By the Company.

(a) With Cause. The Company may terminate Employee's employment pursuant to this Agreement for Cause, as defined below, immediately upon written notice to Employee.

(b) Cause. "Cause" shall mean any of the following:

(i) any willful refusal to perform essential job duties which continues for more than ten (10) days after notice from the Company;

(ii) any intentional act of fraud or embezzlement by the Employee in connection with the Employee's duties or committed in the course of Employee's employment;

(iii) any gross negligence or willful misconduct of the Employee with regard to the Company or any of its subsidiaries resulting in a material economic loss to the Company;

(iv) the Participant is convicted of a felony;

(v) the Participant is convicted of a misdemeanor the circumstances of which involve fraud, dishonesty or moral turpitude and which is substantially related to the circumstances of Participant's job with the Company;

(iv) any willful and material violation by the Employee of any statutory or common law duty of loyalty to the Company or any of its subsidiaries resulting in a material economic loss; or

(v) any material breach by the Employee of this Agreement or any of the Agreements referenced in Section 8 of this Agreement.

(c) Without Cause. Subject to Section 7.1, the Company may terminate Employee's employment pursuant to this Agreement without Cause upon at least thirty days' written notice ("Company Notice Period") to Employee. Upon any termination by the Company under this Section 6.2(c), the Company may, in its sole discretion and at any time during the Company Notice Period, suspend Employee's duties for the remainder of the Company Notice Period, as long as the Company continues to pay compensation to Employee, including benefits, throughout the Company Notice Period.

6.3 Death or Disability. Notwithstanding Section 2, in the event of the death or Disability (defined herein) of Employee during the Employment Term, Employee's employment and this Agreement shall immediately and automatically terminate and the Company shall pay Employee (or in the case of death, Employee's designated beneficiary) Base Salary, accrued, unpaid bonuses, in each case up to the date of termination. Neither Employee, his beneficiary nor estate shall be entitled to any severance benefits set forth in Section 7 if terminated pursuant to this section. For purposes of this Agreement, "Disability" shall mean any physical incapacity or mental incompetence as a result of which Employee is unable to perform the essential functions of his job for an aggregate of more than six (6) months during any twelve-month period. Employee acknowledges and agrees that given the nature of Employee's position with the Company it would cause the Company to suffer an undue hardship if required to retain Employee beyond the six (6) month period if Employee remains unable to perform the essential functions of his job, with or without a reasonable accommodation.

6.4 Survival. The agreement described in Section 8 hereof and attached hereto as Schedule A shall survive the termination of this Agreement.

7. Severance and Other Rights Relating to Termination and Change of Control.

7.1 Termination of Agreement Pursuant to Section 6.1(b) or 6.2(c). If the Employee terminates his employment for Good Reason pursuant to Section 6.1(b), or the Company terminates Employee's employment without Cause pursuant to Section 6.2(c), subject to the conditions described in Section 7.3 below, the Company will provide Employee the following payments and other benefits:

(a) The Company shall immediately pay to Employee a lump-sum amount equal to the sum of (i) twelve (12) months of Employee's then current Base Salary, (ii) any accrued but unpaid Base Salary as of the termination date; and (iii) shall pay Employee any accrued but unpaid bonus as of the termination date, on the same terms and at the same times as would have applied had Employee's employment not terminated; provided, that, if such termination occurs on or within the one year period following a Change of Control (as defined in Section 7.2(a)), the Company shall also pay to Employee a pro rata portion of his target bonus.

(b) If Employee elects COBRA coverage for health and/or dental insurance in a timely manner, the Company shall pay the monthly premium payments for such timely elected coverage when each premium is due until the earlier of: (i) twelve months from the date of termination; (ii) the date Employee obtains new employment which offers health and/or dental insurance that is reasonably comparable to that offered by the Company; or (iii) the date COBRA continuation coverage would otherwise terminate in accordance with the provisions of COBRA. Thereafter, health and dental insurance coverage shall be continued only to the extent required by COBRA and only to the extent Employee timely pays the premium payments himself.

(c) The Company shall provide Employee an outplacement consulting package up to a maximum value of Ten Thousand Dollars (\$10,000), which shall be selected at the sole discretion of the Employee. Any payments made for such outplacement consulting shall be made by the Company directly to the consulting company.

(d) Employee will receive any awards under the LTIP that are earned (as defined in any LTIP document), whether vested or unvested, as of the termination date, on terms and at the times set forth in the LTIP.

(e) Fifty percent (50%) percent of stock options granted to Employee shall immediately become fully vested and exercisable upon such termination or resignation. Executive will be entitled to exercise such stock options in accordance with Section 7.7.

7.2 Change of Control. The Board of Directors of the Company has determined that it is in the best interests of the Company and its stockholders to assure that the Company will have the continued dedication of the Employee, notwithstanding the possibility, threat or occurrence of a Change of Control (defined in Section 7.2(a) below). The Board believes it is imperative to diminish the inevitable distraction of the Employee by virtue of the personal uncertainties and risks created by a pending or threatened Change of Control and to encourage the Employee's full attention and dedication to the Company currently and in the event of any threatened or pending Change of Control, and to provide the Employee with compensation and benefits arrangements upon a Change of Control which ensure that the compensation and benefits expectations of the Employee will be satisfied and which are competitive with those of other similarly-situated companies. Therefore, in order to accomplish these objectives, the Board has caused the Company to include the provisions set forth in this Section 7.2.

(a) Change of Control. "Change of Control" shall mean, and shall be deemed to have occurred if, on or after the date of this Agreement, (i) any "person" (as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended)

or group acting in concert, other than a trustee or other fiduciary holding securities under an employee benefit plan of the Company acting in such capacity or a corporation owned directly or indirectly by the stockholders of the Company in substantially the same proportions as their ownership of stock of the Company, becomes the "beneficial owner" (as defined in Rule 13d-3 under said Act), directly or indirectly, of securities of the Company representing more than 50% of the total voting power represented by the Company's then outstanding Voting Securities, (ii) during any period of two consecutive years, individuals who at the beginning of such period constitute the Board of Directors of the Company and any new director whose election by the Board of Directors or nomination for election by the Company's stockholders was approved by a vote of at least two thirds (2/3) of the directors then still in office who either were directors at the beginning of the period or whose election or nomination for election was previously so approved, cease for any reason to constitute a majority thereof, (iii) the stockholders of the Company approve a merger or consolidation of the Company with any other corporation other than a merger or consolidation which would result in the Voting Securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into Voting Securities of the surviving entity) at least 80% of the total voting power represented by the Voting Securities of the Company or such surviving entity outstanding immediately after such merger or consolidation, or (iv) the stockholders of the Company approve a plan of complete liquidation of the Company or an agreement for the sale or disposition by the Company of (in one transaction or a series of related transactions) all or substantially all of the Company's assets.

(b) Acceleration of Vesting of Stock Options. Vesting of stock options granted to Employee shall be accelerated upon any Change of Control to the extent set forth in the applicable stock option agreement(s) between the Company and Employee. Employee will be entitled to exercise such stock options in accordance with such option agreements.

(c) LTIP Awards. Any awards granted to Employee under the LTIP as of the Change of Control shall be treated as described in the LTIP.

(d) If, within six (6) months before or after the effective date of a Change of Control, the Employee terminates his employment for Good Reason pursuant to Section 6.1(b) or the Company terminates Employee's employment without Cause pursuant to Section 6.2(c), subject to the conditions described in Section 7.3 below, the termination shall be treated for purposes of Section 7.2(b) and (c) as if it occurred on the effective date of the Change of Control.

(e) Payments and benefits that trigger Sections 280G and 4999 of the Internal Revenue Code of 1986, as amended, will be reduced to the extent necessary so that no excise tax would be imposed if doing so would result in the employee retaining a larger after-tax amount, taking into account the income, excise and employment taxes imposed on the payments and benefits.

7.3 Conditions Precedent to Payment of Severance. The Company's obligations to Employee described in Sections 7.1 and 7.2 are contingent on Employee's delivery to the Company of his signed waiver and release, in the form attached hereto as Exhibit 7.3, of all claims he may have against the Company up to the date of the termination of his employment

with the Company, and (if applicable) his not revoking such release. Moreover, the Employee's rights to receive payments and benefits pursuant to Sections 7.1 and 7.2 are conditioned on the Employee's ongoing compliance with his obligations as described in Section 8 hereof. Any cessation by the Company of any such payments and benefits shall be in addition to, and not in lieu of, any and all other remedies available to the Company for Employee's breach of his obligations described in Section 8 hereof.

7.4 No Severance Benefits. Employee is not entitled to any severance benefits if this Agreement is terminated pursuant to Sections 6.1(a) or 6.2(a) of this Agreement; provided however, Employee shall be entitled to (i) Base Salary prorated through the effective date of such termination; (ii) Bonuses for which the payment date occurs prior to the effective date of such termination; and (iii) medical coverage and other benefits required by law and plans (as provided in Section 7.6, below).

7.5 Benefits Required by Law and Plans; Vacation Time Pay. In the event of the termination of Employee's employment, Employee will be entitled to medical and other insurance coverage, if any, as is required by law and, to the extent not inconsistent with this Agreement, to receive such additional benefits as Employee may be entitled under the express terms of applicable benefit plans (other than bonus or severance plans) of the Company, its subsidiaries and Affiliates.

7.6 Exercise Period of Stock Options after Termination. Unless it would subject the employee to adverse tax consequences under Section 885 of the recently enacted American Jobs Creation Act of 2004, Pub. Law No. 108-357, 118 Stat. 1418 (the Act), added ss. 409A to the Internal Revenue Code (Code), notwithstanding anything contained herein or in the option grant agreements to the contrary, in the event of Employee's termination after his first anniversary with the Company, Employee's vested stock options shall be open for exercise until the earlier of (i) two years from the date of termination or (ii) the latest date on which those options expire or are eligible to be exercised under the option grant agreements, determined without regard to such termination or resignation; provided further that such extended exercise period shall not apply in the event the Employee resigns without Good Reason or is terminated by the Company for Cause, in which case, the exercise periods shall continue to be governed by the terms of the option grant agreements.

8. Restrictions.

8.1 The Confidential Information Agreement. Simultaneously with the execution of this Agreement, Employee will sign the Employee Agreement with Respect to Confidential Information, Invention Assignment and Arbitration attached hereto as Schedule A (the "Confidential Information Agreement").

8.2 Agreement Not to Compete. In consideration for all of the payments and benefits that may become due to Employee under this Agreement, Employee agrees that for a period of twelve (12) months after termination of his employment for any reason, he will not, directly or indirectly, without the Company's prior written consent, (a) perform for a Competing Entity in any Restricted Area any of the same services or substantially the same services that he performed for the Company; (b) in any Restricted Area, advise, assist, participate in, perform services for, or

consult with a Competing Entity regarding the management, operations, business or financial strategy, marketing or sales functions or products of the Competing Entity (the activities in clauses (a) and (b) collectively are, the "Restricted Activities"); or (c) solicit or divert the business of any Restricted Customer. Employee acknowledges that in his position with the Company he has had and will have access to knowledge of confidential information about all aspects of the Company that would be of significant value to the Company's competitors.

8.3 Additional Definitions.

(a) Customer. "Customer" means any individual or entity for whom the Company has provided services or products or made a proposal to perform services or provide products.

(b) Restricted Customer. "Restricted Customer" means any Customer with whom/which Employee had contact on behalf of the Company during the 12 months preceding the end, for whatever reason, of his employment.

(c) Competing Entity. "Competing Entity" means any business entity engaged in the development, design, manufacture, marketing, distribution or sale of molecular diagnostics.

(d) Restricted Area. "Restricted Area" means any geographic location where if Employee were to perform any Restricted Activities for a Competing Entity in such a location, the effect of such performance would be competitive to the Company.

8.4 Reasonable Restrictions on Competition Are Necessary.

Employee acknowledges that reasonable restrictions on competition are necessary to protect the interests of the Company. Employee also acknowledges that he has certain skills necessary to the success of the Company, and that the Company has provided and will provide to him certain confidential information that it would not otherwise provide because he has agreed not to compete with the business of the Company as set forth in this Agreement.

8.5 Restrictions Against Solicitations. Employee further covenants and agrees that during Employee's employment by the Company and for a period of twelve months following the termination of his employment with the Company for any reason, he will not, except with the prior consent of the Company's Chief Executive Officer, directly or indirectly, solicit or hire, or encourage the solicitation or hiring of, any person who is an employee of the Company for any position as an employee, independent contractor, consultant or otherwise, provided that the foregoing shall not prevent Employee from serving as a reference.

8.6 Affiliates. For purposes of this Section 8, the term "Company" will be deemed to include the Company and its Affiliates.

8.7 Ability to Obtain Other Employment. Employee hereby represents that his experience and capabilities are such that in the event his employment with the Company is terminated, he will be able to obtain employment if he so chooses during the period of non-competition following the termination of employment described above without violating the terms of this Agreement, and that the enforcement of this Agreement by injunction, as described below, will not prevent him from becoming so employed.

8.8 Injunctive Relief. Employee understands and agrees that if he violates any provision of this Section 8, then in any suit that the Company may bring for that violation, an order may be made enjoining him from such violation, and an order to that effect may be made pending litigation or as a final determination of the litigation. Employee further agrees that the Company's application for an injunction will be without prejudice to any other right of action that may accrue to the Company by reason of the breach of this Section 8.

8.9 Section 8 Survives Termination. The provisions of this Section 8 will survive termination of this Agreement.

8.10 Condition of Payments. The provisions of this Section 8 regarding the restrictions on Employee shall be conditioned on Company making the payments to Employee as contemplated by Section 7.1 above. If Employee is terminated due to a disability pursuant to Section 6.3 or if Employee voluntarily resigns without Good Reason, in which case Employee will not be eligible to receive the severance payments set forth in Section 7.1, Employee shall not be bound by the agreement not to compete in Section 8.2. Employee, will, however, remain bound at all times by the Confidential Information Agreement and the restriction on solicitation in Section 8.5.

9. Arbitration. Unless other arrangements are agreed to by Employee and the Company, any disputes arising under or in connection with this Agreement, other than a dispute in which the primary relief sought is an equitable remedy such as an injunction, will be resolved by binding arbitration to be conducted pursuant to the Agreement for Arbitration Procedure of Certain Employment Disputes attached as Schedule B hereof.

10. Assignments; Transfers; Effect of Merger. No rights or obligations of the Company under this Agreement may be assigned or transferred by the Company except that such rights or obligations may be assigned or transferred pursuant to a merger or consolidation, or pursuant to the sale or transfer of all or substantially all of the assets of the Company, provided that the assignee or transferee is the successor to all or substantially all of the assets of the Company. This Agreement will not be terminated by any merger, consolidation or transfer of assets of the Company referred to above. In the event of any such merger, consolidation or transfer of assets, the provisions of this Agreement will be binding upon the surviving or resulting corporation or the person or entity to which such assets are transferred. The Company agrees that concurrently with any merger, consolidation or transfer of assets referred to above, it will cause any successor or transferee unconditionally to assume, either contractually or as a matter of law, all of the obligations of the Company hereunder in a writing promptly delivered to the Employee. This Agreement will inure to the benefit of, and be enforceable by or against, Employee or Employee's personal or legal representatives, executors, administrators, successors, heirs, distributees, designees and legatees. None of Employee's rights or obligations under this Agreement may be assigned or transferred by Employee other than Employee's rights to compensation and benefits, which may be transferred only by will or operation of law. If Employee should die while any amounts or benefits have been accrued by Employee but not yet paid as of the date of Employee's death and which would be payable to Employee hereunder had Employee continued to live, all such amounts and benefits unless otherwise provided herein will be paid or provided in accordance with the terms of this Agreement to such person or persons appointed in writing by Employee to receive such amounts or, if no such person is so appointed, to Employee's estate.

11. No Set-off, No Mitigation Required. Except as expressly provided otherwise in this Agreement, the obligation of the Company to make any payments provided for hereunder and otherwise to perform its obligations hereunder will not be affected by any set-off, counterclaim, recoupment,

defense or other claim, right or action which the Company may have against Employee or others. In no event will Employee be obligated to seek other employment or take other action by way of mitigation of the amounts payable to Employee under any of the provisions of this Agreement, and such amounts will not be reduced (except as otherwise specifically provided herein) whether or not Employee obtains other employment.

12. Taxes. The Company shall have the right to deduct from any payments made pursuant to this Agreement any and all federal, state, and local taxes or other amounts required by law to be withheld.

13. Miscellaneous. No amendment, modification or waiver of any provisions of this Agreement or consent to any departure thereof shall be effective unless in writing signed by the party against whom it is sought to be enforced. This Agreement contains the entire Agreement that exists between Employee and the Company with respect to the subjects herein contained and replaces and supercedes all prior agreements, oral or written, between the Company and Employee with respect to the subjects herein contained. Nothing herein shall affect any terms in the Confidential Information Agreement, the Noncompetition Agreement, the LTIP, and any stock option plans or agreements between Employee and the Company now and hereafter in effect from time to time. If any provision of this Agreement is held for any reason to be unenforceable, the remainder of this Agreement shall remain in full force and effect. Each section is intended to be a severable and independent section within this Agreement. The headings in this Agreement are intended solely for convenience of reference and shall be given no effect in the construction or interpretation of this Agreement. This Agreement is made in the State of Wisconsin and shall be governed by and construed in accordance with the laws of said State. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument. All notices and all other communications provided for in this Agreement shall be in writing and shall be considered duly given upon personal delivery, delivery by nationally reputable overnight courier, or on the third business day after mailing from within the United States by first class certified or registered mail, return receipt requested, postage prepaid, all addressed to the address set forth below each party's signature. Any party may change its address by furnishing notice of its new address to the other party in writing in accordance herewith, except that any notice of change of address shall be effective only upon receipt.

The parties hereto have executed this Employment Agreement as of the date first written above.

/s/ James J. Herrman

James J. Herrman ("Employee")

Notice Address:
428 Hillside Avenue
Elmhurst, IL 60126

THIRD WAVE TECHNOLOGIES, INC. ("Company")

By: /s/ John J. PUISIS

John J. PUISIS, President and CEO

Notice Address:
502 South Rosa Road
Madison, Wisconsin 53719-1256
Attn: Chief Executive Officer

List of Subsidiaries:

Third Wave Agbio, Inc.

Third Wave-Japan KK

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Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statements (Form S-8 Nos. 33-57664 and 333-120169) of Third Wave Technologies, Inc. pertaining to the 1995 Incentive Stock Option Plan, 1997 Incentive Stock Option Plan, 1997 Nonqualified Stock Option Plan, 1998 Incentive Stock Option Plan, 1999 Incentive Stock Option Plan, 1999 Nonqualified Stock Option Plan, 2000 Stock Plan and 2000 Employee Stock Purchase Plan and in the related prospectuses of our reports dated March 4, 2005, with respect to the consolidated financial statements and schedule of Third Wave Technologies, Inc., Third Wave Technologies, Inc. management's assessment of the effectiveness of internal control over financial reporting, and the effectiveness of internal control over financial reporting of Third Wave Technologies, Inc., included in this Annual Report (Form 10-K) for the year ended December 31, 2004.

Ernst & Young LLP

Milwaukee, Wisconsin
March 14, 2005

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CERTIFICATION

I, John J. Puisis, President and Chief Executive Officer of Third Wave Technologies, Inc. (the "registrant"), certify that:

1. I have reviewed this Annual Report on Form 10-K of the registrant;
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting as defined in Exchange Act Rules 13a-15(f) and 15d-15(f) for the registrant and have:
 - a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report, based on such evaluation; and
 - d. disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and,
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
 - (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial data; and
 - (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 15, 2005

/s/ John J. Puisis

John J. Puisis

CERTIFICATION

I, James J. Herrmann, Vice President of Finance and principal financial officer of Third Wave Technologies, Inc. (the "registrant"), certify that:

1. I have reviewed this Annual Report on Form 10-K of the registrant;
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting as defined in Exchange Act Rules 13a-15(f) and 15d-15(f) for the registrant and have:
 - a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report, based on such evaluation; and
 - d. disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and,
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
 - (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial data; and
 - (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 15, 2005

/s/ James J. Herrmann

James J. Herrmann

CERTIFICATION PURSUANT TO 18 U.S.C SECTION 1350,
OF CHAPTER 63 OF TITLE 18
OF THE UNITED STATES CODE

I, John J. Puisis, President and Chief Executive Officer of Third Wave Technologies, Inc. (the "Company"), certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that on the date of this Certification:

1. the Annual Report on Form 10-K of the Company for the annual period ended December 31, 2004, (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 15, 2005

/s/ John J. Puisis

John J. Puisis

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CERTIFICATION PURSUANT TO 18 U.S.C SECTION 1350,
OF CHAPTER 63 OF TITLE 18
OF THE UNITED STATES CODE

I, James J. Herrmann, Vice President of Finance and principal financial officer of Third Wave Technologies, Inc. (the "Company"), certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that on the date of this Certification:

1. the Annual Report on Form 10-K of the Company for the annual period ended December 31, 2004, (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 15, 2005

/s/ James J. Herrmann

James J. Herrmann

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