

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, 2010

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: 333-136424

**WaferGen Bio-systems, Inc.**

(Exact Name of Registrant as Specified in its Charter)

**Nevada**

(State or other jurisdiction of incorporation or organization)

**90-0416683**

(IRS Employer Identification No.)

**7400 Paseo Padre Parkway, Fremont, CA**

(Address of principal executive offices)

**94555**

(Zip Code)

**(510) 651-4450**

(Registrant's telephone number, including area code)

Securities registered under Section 12(b) of the Exchange Act:

Title of each class: None

Name of each exchange on which registered: None

Securities registered under Section 12(g) of the Exchange Act:

Common stock, \$0.001 par value per share  
(Title of Class)

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

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

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 whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☐ No ☐

Indicate by check mark if disclosure of delinquent filers in response to Item 405 of Regulation S-K (§229.405 of this chapter) 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. ☐

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

Large accelerated filer ☐

Accelerated filer ☐

Non-accelerated filer ☐ (Do not check if a smaller reporting company)

Smaller reporting company ☒

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

As of June 30, 2010 (the last business day of the registrant's most recently completed second fiscal quarter), the aggregate market value of voting and nonvoting common equity held by non-affiliates of the registrant was \$38,928,324. As of that date, 28,414,835 shares of the registrant's common stock, \$0.001 par value per share, were held by non-affiliates. For purposes of this information, the outstanding shares of common stock that were held by directors and executive officers of the registrant were deemed to be shares of common stock held by affiliates at that date. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of March 29, 2011, the registrant had a total of 41,368,741 shares of common stock issued and outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the Proxy Statement for the Registrant's 2011 Annual Meeting of Stockholders to be filed with the SEC within 120 days of December 31, 2010, are incorporated by reference in Part III of this Form 10-K to the extent stated herein.

## TABLE OF CONTENTS

	<u>Page</u>
<u>FORWARD LOOKING STATEMENTS</u>	<u>1</u>
<b>PART I</b>	
<u>ITEM 1. Business</u>	<u>2</u>
<u>ITEM 1A. Risk Factors</u>	<u>10</u>
<u>ITEM 1B. Unresolved Staff Comments</u>	<u>21</u>
<u>ITEM 2. Properties</u>	<u>21</u>
<u>ITEM 3. Legal Proceedings</u>	<u>22</u>
<u>ITEM 4. (Removed and Reserved)</u>	<u>22</u>
<b>PART II</b>	
<u>ITEM 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	<u>23</u>
<u>ITEM 7. Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	<u>24</u>
<u>ITEM 8. Financial Statements and Supplementary Data</u>	<u>33</u>
<u>ITEM 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	<u>68</u>
<u>ITEM 9A. Controls and Procedures</u>	<u>68</u>
<u>ITEM 9B. Other Information</u>	<u>69</u>
<b>PART III</b>	
<u>ITEM 10. Directors, Executive Officers and Corporate Governance</u>	<u>70</u>
<u>ITEM 11. Executive Compensation</u>	<u>70</u>
<u>ITEM 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	<u>70</u>
<u>ITEM 13. Certain Relationships and Related Transactions, and Director Independence</u>	<u>70</u>
<u>ITEM 14. Principal Accountant Fees and Services</u>	<u>70</u>
<b>PART IV</b>	
<u>ITEM 15. Exhibits and Financial Statement Schedules</u>	<u>71</u>
<u>SIGNATURES</u>	<u>75</u>
<u>EXHIBIT INDEX</u>	<u>76</u>

---

## FORWARD LOOKING STATEMENTS

Information included in this Form 10-K may contain forward-looking statements. Except for the historical information contained in this discussion of the business and the discussion and analysis of financial condition and results of operations, the matters discussed herein are forward looking statements. These forward looking statements include but are not limited to the Company's plans for sales growth and expectations of gross margin, expenses, new product introduction, and the Company's liquidity and capital needs. This information may involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from future results, performance or achievements expressed or implied by any forward-looking statements. Forward-looking statements, which involve assumptions and describe our future plans, strategies and expectations, are generally identifiable by use of the words "may," "will," "should," "expect," "anticipate," "estimate," "believe," "intend" or "project" or the negative of these words or other variations on these words or comparable terminology. In addition to the risks and uncertainties described in "Risk Factors" below and elsewhere in this Form 10-K, these risks and uncertainties may include consumer trends, business cycles, scientific developments, changes in governmental policy and regulation, currency fluctuations, economic trends in the United States and inflation. Forward-looking statements are based on assumptions that may be incorrect, and there can be no assurance that any projections or other expectations included in any forward-looking statements will come to pass. Our actual results could differ materially from those expressed or implied by the forward-looking statements as a result of various factors. Except as required by applicable laws, we undertake no obligation to update publicly any forward-looking statements for any reason, even if new information becomes available or other events occur in the future.

*As used in this Annual Report on Form 10-K, where the context otherwise requires or where otherwise indicated, the terms "WaferGen," the "Company," "we," "our" and "us" refer, prior to the Merger discussed below, to Wafergen, Inc. and after the Merger, to WaferGen Bio-systems, Inc. (or "WBSI"), together with its consolidated subsidiaries as a combined entity. On May 31, 2007, Wafergen, Inc. was acquired by WBSI. In the transactions, Wafergen, Inc. merged with a subsidiary of WBSI and became a wholly owned subsidiary of WBSI (the "Merger"). Wafergen, Inc. was considered the "acquirer" for accounting purposes, and accordingly the historical financial statements of Wafergen, Inc. for periods prior to the Merger replaced those of WBSI.*

## PART I

### Item 1. Business

#### Overview

WaferGen was incorporated in Delaware on October 22, 2002. Our headquarters are located in Silicon Valley in Fremont, California. We also have a subsidiary in Kulim Hi-Tech Park, Kedah, Malaysia. Since beginning operations in 2003, we have been engaged in the development, manufacture and marketing of laboratory analytical instruments for cell biology, and later started the development of analytical instrumentation for gene expression and genotyping research for the life sciences and pharmaceutical drug discovery industries. On May 31, 2007, WaferGen merged with a subsidiary of WBSI and became a wholly owned subsidiary of WBSI, incorporated in Nevada, which is continuing the business of WaferGen as a publicly traded company.

Our products are aimed at professionals who perform genetic analysis, primarily at pharmaceutical and biotech companies, academic and private research centers and diagnostics companies involved in biomarker (gene expression profiling) and genotyping research. Pharmaceutical and biotech companies spent approximately \$65.3 billion in 2009 on research and development for new drug discovery, according to a combined analysis conducted by Burrill & Company. We believe that many of these efforts seek new therapeutic drugs, and that much of this spending will be directed at developments at the molecular level for understanding the expression of specific segments of DNA<sup>1</sup> (or genes). Through our SmartChip Real-Time PCR System (“SmartChip System”) we are aiding professionals in re-defining performance standards with significant time and cost savings in the fields of personalized medicine and pharmacogenomics (the study of how genes affect the way individuals respond to drugs).

We are primarily focused on developing a gene expression and genotyping product, the WaferGen SmartChip System. In August 2010, we formally launched our first generation SmartChip 5K System, which is an innovative real-time polymerase chain reaction (“real-time PCR”)<sup>2</sup> tool to enable scientists to study thousands of genes simultaneously based on gene specific pathways, potentially leading to discovery of clinically relevant disease signatures. We believe that the SmartChip System is ideal for the large and growing genomics markets, including for researchers seeking to confirm discoveries made with the growing use of next-generation sequencing<sup>3</sup>. In addition to commercializing our SmartChip System, we also offer a service for gene-expression profiling using the SmartChip System in-house.

Gene expression is fundamental in understanding many disease processes and hence, drug efficacy. For example, in the field of oncology (cancer treatment), greater understanding of gene expression by certain types of cancerous cells has led to the discovery of specific disease biomarkers that allow clinicians more accurate diagnosis, prognosis and treatment options for their patients. Examples of drugs developed by others specifically targeting biomarkers include Herceptin, used in the treatment of breast cancer, and Gleevec, used in the treatment of chronic myelogenous leukemia. Researchers are targeting at the molecular level and are focusing attention and research budgets on research tools that help them to develop therapies for other highly prevalent disease states, including heart and lung disease, arthritis, and diabetes.

We believe that an era is dawning of personalized treatment based on genetic analysis that will initially provide options for patients with certain malignancies and will expand to other diseases. The SmartChip System’s high density, rapid cycling configuration is expected to provide throughput levels that are expected to deliver clinical research solutions at a fraction of the time and cost currently possible with existing competing systems. The SmartChip System also will be used for genotyping.

- 
- 1 DNA (Deoxyribonucleic acid) – A polymeric molecule consisting of deoxyribonucleotide building blocks that in a double-stranded, double helical form is the genetic material of most organisms.
  - 2 Polymerase Chain Reaction (PCR) – PCR is an enzymatic process to increase the number of copies of DNA for easier detection. Real-time PCR chemistries allow for detection of the reaction in the early phase rather than the late phase of the reaction. The polymerase enzyme “reads” an intact DNA strand as a template and uses it to synthesize the a new strand, which sets in motion a chain reaction in which the DNA template is exponentially amplified, generating millions or more copies of the DNA piece. Real-time PCR simultaneously amplifies and quantifies (as an absolute number of copies or relative amount) a targeted DNA molecule in real time after each amplification cycle.
  - 3 Next Generation Sequencing – Sequencing is the determination of the order of nucleotides that make up the primary structure in DNA molecules. Early determination methods occurred in the 1970s. Next generation sequencing refers to more current automated methods that grew from new dye-based approaches enabling easier and considerably faster analysis.

WaferGen employs a business model that primarily generates revenue from both the sale of instruments (i.e. the SmartChip System) and a recurring revenue stream from the sale of consumables (i.e. the SmartChip Panel), similar to the “razor and razor blade” business model. In addition, we also generate revenue by offering our service for biomarker profiling of thousands of genes using the SmartChip System in-house to customers that do not wish to make significant capital investments.

## Products

### Gene Expression Products

#### *Genomics Background*

DNA is a molecule, contained in the chromosomes in the nucleus of each living cell, that encodes the genetic instructions used in the development and functioning of all known organisms (other than some viruses). The DNA segments that carry this genetic information are called genes (other DNA segments are involved in regulating the use of the genes or have merely structural purposes). Chemically, DNA consists of a long chain of simple units called nucleotides, with a backbone made of sugar and phosphate groups. Attached to each sugar in the backbone is one of four types of molecules called bases. It is the sequence of these four bases along the backbone that encodes information, like a four-letter alphabet.

DNA does not usually exist as a single molecule, but instead as a tightly associated pair of molecules. These two long strands entwine like vines, in the shape of a double helix. Each type of base on one strand forms a bond with just one type of base on the other strand. This is called complementary base pairing. Thus a particular sequence of bases on one strand will only bind with an exactly complementary sequence on another strand. The binding of single strands of DNA to form double-stranded DNA is termed hybridization.

Genes are segments of DNA that carry separate information packets of the genome. This information is read when the two strands of DNA “unzip” and the series of bases representing a gene are copied into the related nucleic acid RNA<sup>4</sup>. Like DNA, RNA also has four types of bases that bond with just one type of base on the DNA strand. This complementary base pairing of DNA onto RNA is called transcription. The transcribed RNA strand then separates from the DNA strand and acts as a template for the cell’s machinery to construct functional proteins. The sequence of the RNA bases specifies the sequence of the 20 standard amino acids that make up proteins. This process of translating genes in DNA into functional proteins is called gene expression.

Proteins are essential parts of organisms and participate in every process within cells. Many proteins are enzymes that catalyze biochemical reactions and are vital to metabolism. Proteins also have structural or mechanical functions, such as in muscle and the cellular “scaffolding” that maintains cell shape. Other proteins are important in cell signaling, immune responses, cell adhesion and cell division.

Another contributor to disease and dysfunction is the over- or under-expression of genes within an organism’s cells. A very complex network of genes interacts to maintain health in complex organisms such as humans. Although most cells contain an organism’s full set of genes, each cell, according to its function, expresses only a fraction of this set of genes in different quantities and at different times. The challenge for scientists is to delineate the associated genes’ expression patterns and their relationship to disease.

Every person inherits two copies of each gene, one from each parent. The two copies of each gene may be identical, or they may be different (when they differ, the different versions are called alleles). These differences are referred to as genetic variation. Examples of the physical consequences of genetic variation include differences in eye and hair color. Genetic variation can also have important medical consequences. Genetic variation affects disease susceptibility, including predisposition to cancer, diabetes, cardiovascular disease and Alzheimer’s disease. In addition, genetic variation may cause people to respond differently to the same drug treatment. A common form of genetic variation is a single-nucleotide polymorphism, or SNP. A SNP is a variation in a single “letter” in the DNA sequence between the two copies of the same gene. While in some cases a single SNP will be responsible for medically important effects, it is now believed that combinations of SNPs may contribute to the development of most common diseases. Since there are generally millions of SNPs in an individual, it is important to investigate many SNPs simultaneously in order to discover medically valuable information.

---

4 RNA (Ribonucleic acid) – A polymeric molecule consisting of ribonucleotide building blocks. The three major types in cells are ribosomal RNA (rRNA), transfer RNA (tRNA), and messenger RNA (mRNA), each of which performs an essential role in protein synthesis. RNAi is RNA interference that helps regulate turning genes on and off.

## Gene Expression Technology Overview

Gene expression is used to provide information on the roughly 22,000 genes within the human genome. Life science researchers use gene expression profiling to study the differences in expression of genes in a normal versus a disease state. For example, a comparison of gene expression profile of breast cancer patients to those of normal patients will provide an indication of genes that are expressed differently between the two populations. Such differences can lead to identifications of genes that may be indicative of a disease state. One such example is the HER2 gene known to play a role in breast cancer. Furthermore, such differences can help physicians make treatment decisions. Researchers are conducting studies to identify a single or multiple genes that play a role in a particular disease. There are two technologies used to study gene expression, microarray and real-time PCR.

Microarrays consist of miniscule amounts of hundreds or thousands of gene sequences that are chemically attached to a surface, such as a microchip, a glass slide, or a bead. When a gene is activated in a cell, cellular machinery transcribes the gene's DNA sequence into messenger RNA. As described above, the RNA is complementary and therefore will bind to the original portion of the DNA strand from which it was copied. To determine which genes are turned on and which are turned off in a given cell, the messenger RNA molecules present in that cell are collected and labeled by attaching a fluorescent dye. The labeled mRNA is placed onto a DNA microarray slide. The mRNA that was present in the cell, together with its fluorescent tag, will then hybridize—or bind—to its complementary DNA on the microarray.

A special scanner is used to measure the fluorescent areas on the microarray. If a particular gene is very active, it produces many molecules of messenger RNA, which hybridize to the DNA on the microarray and generate a very bright fluorescent area. Genes that are somewhat active produce fewer mRNAs, which results in dimmer fluorescent spots. If there is no fluorescence, none of the messenger molecules have hybridized to the DNA, indicating that the gene is inactive.

However, microarrays have limited sensitivity, accuracy and dynamic range. Human genes are expressed across a “six log” range (a single copy to a million copies) in a cell, with most species of RNA being present in fewer than 100 copies. The dynamic range of microarrays is estimated to be 2 to 3 logs<sup>5</sup>. Microarrays are able to detect genes that are expressed in large numbers of copies but miss genes that are present in fewer than 100 copies. Thus microarrays capture only 20-40% of the expressed genes. Consequently, one obtains only a partial view of the expression profile when utilizing microarrays due to the limited sensitivity. These overlooked genes may be important in a particular disease state. As a consequence of these limitations, the discovery of genes identified by microarray technology requires further validation using real-time PCR.

The second technology, real-time PCR, represents a sensitive and accurate method to measure gene expression. PCR is an enzymatic process in which a short strand of DNA is copied multiple times, or amplified, so that it can be more readily detected and analyzed. The vast majority of PCR methods use thermal cycling, i.e., alternately heating and cooling the sample to a defined series of temperature steps. These thermal cycling steps are necessary to physically separate the strands in a DNA double helix (at high temperatures), which are then used as the template during DNA synthesis (at lower temperatures) by the DNA polymerase enzyme to selectively amplify the target DNA.

Traditional PCR merely increases the number of DNA copies for easier detection. Real-time PCR permits quantitative analysis, rather than just a qualitative yes/no as to the presence of a gene. Real-time PCR can produce an absolute measurement, such as number of copies of mRNA per nanoliter of sample, or a relative measurement in comparison to other expressed genes. Furthermore, real-time PCR chemistries allow for the detection in the early phase, rather than the later phase of these reactions, thereby decreasing process time and increasing accuracy.

Because real-time PCR does not measure thousands of genes simultaneously (like a microarray analysis), real-time PCR has low throughput and relatively high cost, making it unfeasible for whole genome analysis or for very high throughput studies. Thus, in practice, researchers typically first use microarray to identify which genes are over- or under-expressed in the whole genome and then apply real-time PCR to a specific set of those genes to accurately quantify gene expression. The process is referred to as discovery and validation.

---

5 Log (logarithm) range is the standard way of expressing sensitivity range; it is calculated by a serial dilution of the sample, with each tenfold dilution being one log; if, for example, a sample is diluted four times by tenfold, and a device is able to detect a gene signal in all these dilutions, then the dynamic range of the detector is said to be three logs.

## SmartChip System

We believe our SmartChip System combines the best of both existing gene expression technologies and genome analysis enabled by microarrays with the sensitivity and accuracy of real-time PCR, a single platform that enables biomarker discovery and validation. WaferGen's SmartChip Real-Time PCR System consists of three components: a SmartChip Panel comprising 5,184 nanowells preprogrammed with gene-specific reaction content; a SmartChip Nanodispenser for applying sample and reaction mix to the SmartChip Panels; and a SmartChip Cycler for performing and collecting data from the real-time PCR assays. Our SmartChip System provides sub-nanoliter (one-billionth of a liter) dispensing of oligonucleotide reagents and sub-microliter (one-millionth of a liter) dispensing of samples into a 5,184- or 30,000-well chip assembly that allows for high throughput real-time PCR amplification of pathway based gene discovery of the 22,000 genes that represent the whole human genome. Our SmartChip Panels are designed with evaporation control measures that allow for the use of nanoliter volumes, thermal cycling and temperature control. Our software system also analyzes the high throughput data after the completion of the real-time PCR analysis. The user friendly, content-ready SmartChip System is designed to accept samples out of the box, incorporating many of the necessary substrates and chemicals.

The SmartChip System is engineered to deliver superior performance with the combination of high sensitivity and high throughput on a single chip, enabling scientists to rapidly view a large dynamic range of the expressed genes of the human genome. The genetic analysis using the SmartChip System is expected to require one day versus what would currently take days to weeks to discover the gene expression signature with microarrays and then verify the signature with real time PCR utilizing existing genetic analysis systems. As more clinical studies are carried out using validated gene sets, we believe the market will require, and demand, higher throughput solutions to process large numbers of clinical samples. Today's solutions typically allow only a few patients' samples per chip. We believe that we offer a throughput capability that will allow up to hundreds of samples on a single chip.

The current market cost of real-time polymerase chain reaction ("real-time PCR"), which we believe researchers currently view as the "gold standard" for genetic analysis, is approximately \$1.00 per data point. We estimate that the SmartChip System, which is designed to utilize real-time PCR, costs approximately \$0.12 to \$0.20 per acquired data point, or assay.

We believe our SmartChip System is also capable of achieving time-savings when compared to existing technologies. Research analyzing the whole genome utilizing currently available real-time PCR technology takes weeks to months due to multiple plates and hundreds of pipetting steps required. Our goal for design and development of our SmartChip System is to develop the ability to quantitatively analyze the gene specific pathways or whole genome with the performance of real-time PCR technology, which, if we succeed, could be as short as a single day, and would represent a significant advancement. In addition, our development of the SmartChip System seeks to allow 5,184 to 30,000 data points per chip, which could enable a large number of reactions to run in parallel, thus addressing the unmet needs of the clinical trial market. We believe today's leading technologies are limited in throughput of 96 nanowells, 384 nanowells and 1,536 nanowells. Some new entrants in the market place like Fluidigm offer maximum throughput of 10,000 assays per chip but are limited to the validation market by offering products that can do handful of genes in 24 or 96 samples on a single chip with third party solutions for reagents and assays for their chips.

Our SmartChip System is designed as an integrated instrument capable of thermal cycling, real-time detection and software for control and analysis. The product, upon completion, will be available with primer-ready chips for gene expression and genotyping analysis.

The continuing commercialization of our SmartChip System involves two chip and two instrument configurations:

- A 5,184-well chip for study of gene panels or for candidate genes of interest to customers, which launched in August 2010; and
- A high-throughput system with 30,000 nanowells, which we anticipate will launch before the end of 2011.

An "alpha" version of the SmartChip System was tested at the University of Pittsburgh Medical Center (UPMC) under a funding grant from the National Institutes of Health (NIH). This testing was done to conduct novel gene expression research in the area of lung disease. Successful demonstration of sample dispensing, thermal cycling, and real-time fluorescent signal detection of 1,000 oncology genes (in triplicate with negative controls) was achieved on 5,184-well content-ready SmartChip Panels using small amounts of RNA samples (500ngs) from chronic obstructive pulmonary disease (COPD), idiopathic pulmonary fibrosis (IPF) and healthy patients. The researchers' goal was to identify and validate disease-specific gene

---

6 An oligonucleotide is a short nucleic acid polymer, typically with twenty or fewer bases.

expression signatures for patient segmentation and therapy monitoring. Additionally, this research will include the development and application of the PulmoSmartChip, a custom designed SmartChip molecular phenotyping assay for COPD and IPF. The PulmoSmartChip, which will include the lowest number of genes that distinguish all phenotypes of IPF and COPD, will be used to identify and validate module networks (sets of genes that are co-regulated to carry out a common function) capable of predicting the natural history of the diseases and patients' response to specific therapeutics. Researchers at UPMC believe that the availability of these modules, as well as the validated PulmoSmartChip assay that allows their measurement using parallel quantitative real-time PCR, will be a significant step in laying the foundations for the introduction of personalized medicine approaches in pulmonary medicine.

Early in 2008 we formed a subsidiary company, WaferGen Biosystems (M) Sdn. Bhd. ("WGBM"), and announced the formal opening of our new, state-of-the-art facilities in Kulim Hi-Tech Park, Kedah, Malaysia. WGBM is launching various initiatives to support a number of ongoing SmartChip System development and commercialization goals. The primary functions of this organization are to oversee regional research and development activities related to the SmartChip System, pursuing and establishing valuable research and development collaborations with local universities and government-run research centers, and coordinating production of the SmartChip System with WaferGen's Malaysia-based contract manufacturer.

Initial work at the subsidiary is focused on research and development activities related to the optimization of various gene panel assays to be used with the SmartChip System. These assays are for developing disease and pathway specific gene panels. To support these research and development efforts, WaferGen intends to work with the Malaysian Industrial Development Authority (MIDA) and the Malaysian Biotechnology Corporation Sdn. Bhd. (BiotechCorp) to facilitate and accelerate the operation of WGBM.

In February 2010, WaferGen scientists presented validation results of the SmartChip System at Cambridge Healthcare Institute's 17th International Molecular Medicine Tri-Conference. The poster presentation provided an overview of our whole genome, high-throughput SmartChip System, and data to demonstrate the system's ability to quantify gene expression levels by real-time PCR for a large number of genes at one time utilizing a simple workflow. WaferGen's SmartChip Human Oncology Gene Panel was used to quantify changes in gene expression levels in breast and lung tumors. Data from the study support the conclusion that WaferGen's SmartChip System provides an easy solution to perform massively parallel gene expression studies using real-time PCR technology. In addition, the availability of content-ready chips allows for an easy workflow for the researcher. Finally, the system allows analysis of thousands of genes using low (0.5 mg) sample input.

We have designed and launched our 5,184-well chips, and to date we have 27 customers and/or collaborators who have either purchased or used SmartChip products and/or services in their research projects in the U.S., Japan and Europe, including Stanford University; University of California at San Francisco; University of Pittsburgh Medical Center (UPMC); University of Southern California (USC); the University of Texas Southwestern; Kyoto University; DNA Chip Research Inc. (DCRI, a Japanese contract services provider); FEBIT; Ghent University; and Integrated BioBank of Luxembourg (IBBL). We have sold 9 SmartChip Systems to customers in the United States, Europe and the Far East.

We also have a 30,000-well system in development. With the 5,184-well chips, we have demonstrated our ability to perform several key steps required in a commercial version of the SmartChip System, including thermal cycling. This requires the ability to seal the sample nanowells on the chip, which we have also demonstrated. Additional milestones that we achieved in 2010 include:

- Processed SmartChip samples through our fee for service business;
- Established early access customers in the U.S., Japan and Europe;
- Completed development of the SmartChip multi sample nano-dispenser; and
- Launched oncology and microRNA gene panels.

### **Market Applications of the SmartChip System**

We believe the SmartChip System, with its advantages of higher throughput, lower cost, superior sensitivity, will have multiple market applications.



We believe the SmartChip System will become the technology of choice in both research and clinical settings.

- **Biomarker Discovery and Validation.** New targets (biomarkers) for drugs can be identified through the analysis of gene profile expression in diseased cells. Potential applications include cancers, arthritis, and lung diseases.
- **Drug Efficacy and Optimization.** Genetic analysis is being used to determine the likely toxicity (toxicogenomics) of new drugs and the likelihood of therapeutic response to a specific genetic profile (pharmacogenomics). FDA guidance<sup>7</sup> calls for drug companies to voluntarily submit pharmacogenomic data to support their drug development programs.
- **Drug Response Monitoring.** Patient outcomes can be improved by evaluation of a proposed drug's potency and specificity in order to determine individualized patient dosing, thereby decreasing adverse drug reactions, and improving drug efficacy.
- **Detection of Rare Mutations.** The Cancer Genome Project is using the human genome sequence and high throughput mutation detection techniques to identify somatically acquired<sup>8</sup> sequence variants/mutations and hence identify genes critical in the development of human cancers.

**Biomarker Discovery and Validation:** Gene expression patterns (biomarkers) related to specific diseases are becoming increasingly important in drug development. Comparison of gene expression patterns between normal and diseased patients or expression profiles in the presence or absence of drugs leads to discovery of genes or a set of genes that can be used in drug development. This requires monitoring of tens, hundreds or thousands of mRNAs in large numbers. A typical genetic analysis currently involves the use of microarrays to identify genes, which are either over-expressed or under-expressed in a small subset of patients. After detailed bioinformatics analysis, a number of differentially expressed genes (two to 200) are evaluated using real-time PCR in a different subset of patients (50 to 100). The differentially expressed genes in this patient group are then validated using a larger patient group.

This sequential process may take from many months to a few years to complete using currently available techniques. The limitation in today's gene expression studies is the use of microarrays as a starting point for discovery, which only provides a partial glimpse of the expression profile. Real-time PCR techniques, which offer significantly increased sensitivity, are limited in throughput and are cost prohibitive for whole genome analysis. It would cost in excess of \$100,000 per analysis (assuming \$1 per assay, plus reference, plus triplicates) to study even a single whole genome (30,000 genes) sample and will take many months to complete this study (reported in a MicroArray Quality Control study conducted by the FDA published in September 2006 in Nature Biotechnology<sup>9</sup>). Biomarker investigation requires multiples of such analyses to confirm discovery.

**Drug Efficacy and Optimization:** Clinical trials are the most expensive phase for pharmaceutical drug development. The use of gene expression and genotyping is becoming critical to identify a safe drug (toxicogenomics) for the right patient population (pharmacogenomics). Once a set of genes (biomarker) is identified, they are used in numerous samples in clinical trials for pattern recognition, toxicity profiling and patient selection. Similarly, locations of SNPs involved in disease variation and metabolism are also being utilized in clinical trials to understand disease predisposition, requiring thousands of samples to be analyzed.

In its Pharmacogenomic Data Submissions guidance referred to above, the FDA has asked for voluntary data submission utilizing these genetic approaches in clinical trials. This has created a need for reliable, high-throughput, cost-effective technologies. Today's hybridization-based techniques can process only one sample at a time. Thus, for a clinical trial of 1,000 patients, one would need to use 1,000 chips. Established real time PCR instrument suppliers typically process 96 to 1,536 data points. Our SmartChip System offers the ability to study 5,184 assays on a single chip, and thus many samples in candidate genes of interest with limited amount of the biological sample.

**Drug Response Monitoring:** In addition to studying gene expression, genotyping measures genetic variation in the DNA. Sometimes it is not a single variation but the combination of these sequence differences that may lead to a disease state or a response to a specific therapy. For this reason, researchers look at patterns of these variations in a large number of healthy

---

7 FDA News Release - March 22, 2005 – issued a final guidance titled “Pharmacogenomic Data Submissions.”

8 Mutations arising in individual cells in the body outside the “germ-line” (sperm and egg) cells that created the individual, and hence not present in all of a person's cells.

9 The MicroArray Quality Control (MAQC) project shows inter- and intra-platform reproducibility of gene expression measurements, Nature Biotechnology, Vol. 24:9, p 1151, September 2006.

and affected patients in order to correlate SNPs with a specific disease. Large-scale genotyping studies are being conducted in various genome centers around the world, driven by available research funds, resulting in the greater demand for cost effective high throughput solutions.

**Detection of Rare Mutations:** The Cancer Genome Project's DNA sequencing of patients' tumors is underway and is rapidly defining cancer-causing mutations. Today, this is accomplished by using hybridization approaches which are unable to detect rare somatic mutations. Such techniques require the use of more sensitive methods like PCR and require genotyping of many samples (50 to 500). WaferGen intends to use allele-specific PCR with the SmartChip System to enable genotyping at multiple sites in multiple samples, as well as to provide a robust solution for detecting rare mutations. Current allele-selective PCR is able to reliably genotype SNPs (germ-line) and also reliably detect minority (somatic) mutations at sensitivity range of 100 to 10,000 mutations.

**Future Applications – From Research to Diagnostics:** New biomarkers for gene expression and genotyping are eventually expected to become essential for practicing physicians to identify the right drug for the right patients and lead to new ways of diagnosing and monitoring diseases. Biomarkers and platforms that are being used in clinical trials for a particular therapy are expected to become standard for molecular diagnostics. This market is still in its early development.

#### **The WaferGen Service for Gene-Expression Profiling Using the SmartChip System**

In late 2009 we announced a new, innovative service for gene-expression profiling of thousands of genes using the SmartChip Real-Time PCR System. By offering SmartChip services we provide early access to our products and a short-term revenue stream prior to commercialization. By taking advantage of the SmartChip Real-Time PCR System, we are offering universities, pharmaceutical and diagnostic companies a service that utilizes pathway-specific gene panels to discover and validate new biomarkers. Researchers will get early access to the technology and the benefit of new and upcoming gene panels. In addition, academic researchers can get preliminary data at a reasonable cost to submit for grants to complete more advanced studies.

The WaferGen SmartChip Service is targeted at scientists involved in the discovery and validation of molecular biomarkers. The initial product to be run on the SmartChip platform is the SmartChip Human Oncology Gene Panel that provides pathway based gene expression profiling for Oncology. It may also be used for Immunology, Metabolic and Stem Cell research. The 5,184-well SmartChip Panel uses a small amount of biological material to query a thousand genes in a single sample, enabling discovery of biomarkers while saving researchers time and money.

In the first quarter 2010, we made available, as part of this SmartChip gene-expression profiling service, the Human MicroRNA Panel, which provides one of the most comprehensive human microRNA panels presently available, with over 800 microRNAs on a single SmartChip Panel. Development of a second version with over 1,200 microRNAs commenced in late 2010. When launched, it will assure the latest and most complete information is made available to researchers on a single panel. The SmartChip design allows WaferGen to quickly incorporate newly released sequences giving researchers the ability to stay up to date with the latest discoveries.

MicroRNAs are small non-protein-coding single-stranded RNA molecules of 21-23 nucleotides in length that function as negative regulators of gene expression by targeting specific messenger RNAs. This either inhibits translation or promotes messenger RNA degradation. Cancer diagnosis, prognosis, and treatment are important potential clinical applications of microRNA profiling. The new Human MicroRNA expression profiling service will use the human genes from the new miRBase version 14.0 sequence database, providing researchers with the latest, up-to-date-sequences.

#### **Competition**

##### **SmartChip Systems**

We believe the primary industry competitors in the markets in which WaferGen plans to enter and compete are Life Technologies Corporation ("LIFE"), Affymetrix, Inc. ("Affymetrix") and Illumina, Inc. Other companies known to be currently serving the genetic analysis market include Agilent Technologies, Inc., GE Healthcare (a business segment of General Electric Company), Bio-Rad Laboratories, Inc., Eppendorf AG, Beckman Coulter, Inc., Fluidigm Corporation and F. Hoffmann-La Roche & Co. The marketplace for gene expression technologies is highly competitive, with many of the major players already controlling significant market share, many of which have significantly greater financial, technology, and other resources than we do. Affymetrix is the leader in microarrays for whole genome analysis, and LIFE is the market leader for real-time PCR. We believe gene expression is a growing market and this market is driven by the need for real time

PCR performance for discovery, and a higher throughput platform for validation, to overcome the limitations of microarrays and real time PCR technologies that are currently used for discovery and validation respectively. WaferGen's SmartChip Real Time PCR System is presently the only platform that offers a single solution for both biomarker discovery and validation with low running costs, simplified workflow and fast results. Our competitors could compete with us by developing new products similar to our SmartChip System. Even though we believe that we have created a unique solution, this does not mean that our competitors will not develop effective products to compete with our products.

## **Sales and Marketing**

We have experienced marketing and sales executives, and are expanding our sales channel for selling the SmartChip System and services directly in the United States and through distributors in the rest of the world.

## **Seasonality**

We do not have sufficient product history to determine seasonality with a high degree of confidence. It is expected that customers' purchasing patterns will not show significant seasonal variation, although demand for our products may be lowest in the first quarter of the calendar year and highest in the fourth quarter of the calendar year as pharmaceutical and academic customers typically spend unused budget allocations before the end of the fiscal year.

## **Sources and Availability of Raw Material and Principal Suppliers**

The raw materials used in the manufacturing of our products are for the most part readily available from numerous sources.

## **Research and Development**

Our research and development efforts are aimed at finding new varieties of products, improving existing products, improving product quality and reducing production costs. Our research and development expenses were approximately \$6.71 million for the year ended December 31, 2010 and \$5.14 million for the year ended December 31, 2009.

## **Intellectual Property and Other Proprietary Rights**

We are pursuing an intellectual property portfolio, including filing a number of U.S. and international patent applications and in-licensing certain patents covering products, methodologies, integration and applications. We presently have three patents issued in the U.S. with respect to our SmartChip products and technologies, and a number of pending SmartChip-related patent applications worldwide. In addition to our patents, we rely on trade secrets, know-how, and copyright and trademark protection. Our success may depend on our ability to protect our intellectual property rights.

## **Government Regulation and Environmental Matters**

We are subject to a variety of federal, state and municipal environmental and safety laws based on our use of hazardous materials in both our manufacturing and research and development operations. We believe that we are in material compliance with applicable environmental laws and regulations. If we cause contamination to the environment, intentionally or unintentionally, we could be responsible for damages related to the clean-up of such contamination or individual injury caused by such contamination. We cannot predict how changes in the laws and regulations will impact how we conduct our business operations in the future or whether the costs of compliance will increase in the future.

Regulation by governmental authorities in the United States and other countries is not expected to be a significant factor in the manufacturing, labeling, distribution and marketing of our products and systems.

## **Employees**

We have assembled a team of highly qualified scientists, engineers and business managers to support our product development and commercialization activities. Their efforts will continue to focus on selling, improving and refining our core technologies. As of December 31, 2010, we had 55 regular employees, 53 of whom were employed full-time, compared to 35

regular employees as of December 31, 2009, all of whom were employed full-time. None of our employees are represented by a labor union, and we consider our employee relations to be good. We believe that our future success will depend, in part, on our continued ability to attract, hire and retain qualified personnel.

#### **Item 1A. Risk Factors**

The following risk factors should be considered carefully in addition to the other information contained in this report. This report contains forward-looking statements. Forward-looking statements relate to future events or our future financial performance. We generally identify forward-looking statements by terminology such as “may,” “will,” “should,” “expects,” “plans,” “anticipates,” “could,” “intends,” “target,” “projects,” “contemplates,” “believes,” “estimates,” “predicts,” “potential” or “continue” or the negative of these terms or other similar words. These statements are only predictions. The outcome of the events described in these forward-looking statements is subject to known and unknown risks, uncertainties and other factors that may cause our customers’ or our industry’s actual results, levels of activity, performance or achievements expressed or implied by these forward-looking statements, to differ. “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Business,” as well as other sections in this report, discuss some of the factors that could contribute to these differences.

The forward-looking statements made in this report relate only to events as of the date on which the statements are made. We undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events.

This report also contains market data related to our business and industry. These market data include projections that are based on a number of assumptions. If these assumptions turn out to be incorrect, actual results may differ from the projections based on these assumptions. As a result, our markets may not grow at the rates projected by these data, or at all. The failure of these markets to grow at these projected rates may have a material adverse effect on our business, results of operations, financial condition and the market price of our Common Stock.

#### **Risks Related to Our Company and Our Business**

*We will need to raise additional capital to meet our business requirements in the future and such capital raising may be costly or difficult to obtain and could dilute current stockholders’ ownership interests.*

We will need to raise additional capital in the future, which may not be available on reasonable terms or at all. We raised approximately \$9.9 million in net proceeds in our June 2007 private placement, approximately \$3.5 million in net proceeds in our May 2008 private placement, approximately \$5.5 million in net proceeds in our private placement completed in June and August 2009, approximately \$4.5 million in net proceeds in our private placement that completed in December 2009 and January 2010 and approximately \$6.8 million in net proceeds in our registered offering that completed in July 2010. We have also raised approximately \$1.8 million net of origination fees from a term loan in December 2010 and approximately \$8.8 million (5.0 million of which was received in 2011) in net proceeds from the issuance of redeemable convertible preference shares in our Malaysian subsidiary. We expect that such proceeds, together with our income, will fund our operations only through July 2011. We will need to raise additional funds through public or private debt or equity financings to meet various business objectives including, but not limited to:

- pursuing growth opportunities, including more rapid expansion;
- acquiring complementary businesses;
- making capital improvements to improve our infrastructure;
- hiring qualified management and key employees;
- developing new services, programming or products;
- responding to competitive pressures;
- complying with regulatory requirements such as licensing and registration; and
- maintaining compliance with applicable laws.

Any additional capital raised through the sale of equity or equity backed securities may dilute current stockholders' ownership percentages and could also result in a decrease in the market value of our equity securities.

The terms of any securities issued by us in future capital transactions may be more favorable to new investors, and may include preferences, superior voting rights and the issuance of warrants or other derivative securities, which may have a further dilutive effect on the holders of any of our securities then outstanding.

Furthermore, any additional debt or equity financing that we may need may not be available on terms favorable to us, or at all. If we are unable to obtain such additional financing on a timely basis, we may have to curtail our development activities and growth plans and/or be forced to sell assets, perhaps on unfavorable terms, which would have a material adverse effect on our business, financial condition and results of operations, and ultimately could be forced to discontinue our operations and liquidate, in which event it is unlikely that stockholders would receive any distribution on their shares. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources" below. Further, we may not be able to continue operating if we do not generate sufficient revenues from operations needed to stay in business.

In addition, we may incur substantial costs in pursuing future capital financing, including investment banking fees, legal fees, accounting fees, securities law compliance fees, printing and distribution expenses and other costs. We may also be required to recognize non-cash expenses in connection with certain securities we issue, such as convertible notes and warrants, which may adversely impact our financial condition.

***We may not be able to continue as a going concern.***

Our consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. We have a history of operating losses that are likely to continue in the future. We have included an explanatory paragraph in Note 1 of our consolidated financial statements for the year ended December 31, 2010, to the effect that our significant losses from operations and our dependence on equity and debt financing raise substantial doubt about our ability to continue as a going concern. Our accumulated deficit at December 31, 2010 was \$43.3 million. Our consolidated financial statements do not include any adjustments that might be necessary should we be unable to continue as a going concern.

Our operations must begin to provide sufficient revenues to improve our working capital position. If we are unable to become profitable and cannot generate cash flow from our operating activities sufficient to satisfy our current obligations and meet our capital investment objectives, we may be required to raise additional capital or debt to fund our operations, curtail our development activities and growth plans and/or be forced to sell assets, perhaps on unfavorable terms, and ultimately could be forced to discontinue our operations and liquidate, in which event it is unlikely that stockholders would receive any distribution on their shares. We may not be able to raise necessary equity or debt financing on acceptable terms or at all.

***We have a limited history of commercial sales of systems and consumable products, and our success depends on our ability to develop commercially successful products and on market acceptance of our new and relatively unproven technologies.***

We may not possess all of the resources, capability and intellectual property rights necessary to develop and commercialize all of the products or services that may result from our technologies. Our long-term viability growth and profitability will depend upon successful testing, approval and commercialization of the SmartChip System incorporating our technology resulting from our research and development activities. Adverse or inconclusive results in the development and testing of our SmartChip System could significantly delay or ultimately preclude commercialization of our technology. Accordingly, there is only a limited basis upon which to evaluate our business and prospects. An investor in our Company should consider the challenges, expenses, and difficulties we will face as a development stage company seeking to develop and manufacture a new product in a relatively new market.

We must conduct a substantial amount of additional research and development before some of our products will be ready for sale. We currently have fewer resources available for research and development activities than many of our competitors. We may not be able to develop or launch new products in a timely manner, or at all, or they may not meet customer requirements or be of sufficient quality or at a price that enables us to compete effectively in the marketplace. Challenges frequently encountered in connection with the development or early commercialization of products and services using new and relatively unproven technologies might limit our ability to develop and successfully commercialize these products and services. In addition, we may need to enter into agreements to obtain the intellectual property rights necessary to commercialize some of our products or services, which may not be available on favorable terms, or at all.

***We have a history of operating losses which may continue, in which case we may not be able to reach profitability.***

We have a history of losses and may continue to incur operating and net losses for the foreseeable future. We incurred a net loss of \$12.1 million for the year ended December 31, 2010. As of December 31, 2010, our accumulated deficit was \$43.3 million. We have not achieved operating profitability on a quarterly or annual basis. We may not be able to reach a level of revenue to achieve profitability. To date, our revenues have been insufficient to achieve our business plan. Our revenues for the year ended December 31, 2010, were \$2.2 million. If our revenues grow slower than anticipated, or if operating expenses exceed expectations, then we may not be able to achieve profitability in the near future or at all, which may depress our stock price.

***We have a limited operating history for investors to evaluate our business.***

We have had limited operations in the genetic analysis segment of the life science industry. Since we are a company with a limited operating history developing products focused on the analysis of genetic function and variation, it is difficult for potential investors to evaluate our business. Our future operations and growth will likely depend on our ability to fully develop and market our SmartChip products and services. Our proposed operations are subject to all of the risks inherent in light of the expenses, difficulties, complications and delays frequently encountered in connection with the formation of any new business, as well as those risks that are specific to the life science industry. In evaluating us, investors should consider the delays, expenses, problems and uncertainties frequently encountered by companies developing markets for new products, services and technologies. We may never overcome these obstacles and become profitable.

***Difficult conditions in the global capital markets may significantly affect our ability to raise additional capital.***

The ongoing worldwide financial and credit crisis may continue indefinitely. Because of severely reduced market liquidity, we may not be able to raise additional capital when we need it. Because the future of our business will depend on the completion of one or more investment transactions for which, most likely, we will need additional capital, we may not be able to complete such transactions or acquire revenue producing assets. As a result, we may not be able to generate income and, to conserve capital, we may be forced to curtail our current business activities or cease operations entirely.

***Currency risk related to obligations and expenses denominated in Malaysian Ringgit could negatively impact our operating results and financial condition.***

All of the redeemable convertible preference shares ("RCPS") issued by our Malaysia subsidiary, WGBM, were issued in consideration for Malaysian Ringgit, and significant amounts of our subsidiary's expenses are paid for in this currency. At December 31, 2010, the Company had approximately \$1.2 million in assets in Malaysia. Fluctuations in the exchange rate could negatively impact our business operating results and financial condition by resulting in exchange losses or increased expenses, and could increase the likelihood that the investors in the Malaysia subsidiary may elect to convert their RCPS into shares of common stock of WBSI at the conversion price of US\$2.25 per share. Translation adjustments in any particular reporting period could significantly affect, positively or negatively, our reported operating results.

***Because our business depends on research and development spending levels for pharmaceutical and biotechnology companies and academic and governmental research institutions, our success and our operating results will substantially depend on these customers.***

We expect that our revenues in the foreseeable future will be derived primarily from products and services provided to a relatively small number of pharmaceutical and biotechnology companies and academic, governmental and other research institutions. Our success will depend upon their demand for and use of our products and services. Our operating results may fluctuate substantially due to reductions and delays in research and development expenditures by these customers. For example, reductions in capital or operating expenditures by these customers may result in lower than expected instrumentation sales and similarly, reductions in operating expenditures by these customers could result in lower than expected sales by us.

***We expect that our results of operations will fluctuate, which could cause our stock price to decline.***

Our revenue is subject to fluctuations due to the timing of sales of high-value products and services projects, the impact of seasonal spending patterns, the timing and size of research projects our customers perform, changes in overall spending levels in the life sciences industry, the timing and amount of government grant funding programs and other unpredictable factors that may affect customer ordering patterns. Given the difficulty in predicting the timing and magnitude of sales for our products and services, we may experience quarter-to-quarter fluctuations in revenue and/or a sequential decline in quarterly revenue.

In addition, because of our continued research, marketing and hiring in connection with our SmartChip product, we expect operating expenses to continue to increase significantly. Accordingly, if revenue does not grow as anticipated, we may not be able to achieve and maintain profitability. Any significant delays in the commercial launch of our products, unfavorable sales trends in our existing product lines, or impacts from the other factors mentioned above could adversely affect our revenue growth or cause a sequential decline in quarterly revenues. Due to the possibility of fluctuations in our revenue and expenses, we believe that quarterly comparisons of our operating results are not a good indication of our future performance. If our operating results fluctuate or do not meet the expectations of stock market analysts and investors, our stock price probably would decline.

***We may encounter difficulties in managing our expected growth, which could increase our losses.***

We expect to experience rapid and substantial growth in order to achieve our operating plans, which will place a strain on our human and capital resources. If we are unable to manage this growth effectively, our losses could increase. Our ability to manage our operations and growth effectively requires us to continue to expend funds to enhance our operational, financial and management controls, reporting systems and procedures and to attract and retain sufficient numbers of talented employees. If we are unable to scale up and implement improvements to our manufacturing process and control systems in an efficient or timely manner, or if we encounter deficiencies in existing systems and controls, then we will not be able to make available the products required to successfully commercialize our technology.

Failure to attract and retain sufficient numbers of talented employees will further strain our human resources and could impede our growth.

***Our financial condition could be adversely affected in the event of uninsured or inadequately insured loss or damage.***

We may not be able to obtain insurance policies on terms affordable to us that would adequately insure our business and property against damage, loss or claims by third parties. To the extent our business or property suffers any damages, losses or claims by third parties, which are not covered or adequately covered by insurance, the financial condition of our Company may be materially adversely affected.

***If we lose our key personnel or are unable to attract and retain additional qualified personnel, we may be unable to achieve our goals.***

We are highly dependent on our management and scientific personnel, including our chief executive officer, chief operating officer, chief scientific officer and chief financial officer. The loss of any of their services could adversely impact our ability to achieve our business objectives. We will need to hire additional qualified personnel with expertise in molecular biology, chemistry, biological information processing, sales, marketing and technical support. We compete for qualified management and scientific personnel with other life science companies, universities and research institutions, particularly those focusing on genomics. Competition for these individuals, particularly in the San Francisco Bay area, is intense, and the turnover rate can be high. Failure to attract and retain management and scientific personnel would prevent us from pursuing collaborations or developing our products or technologies.

Our planned activities will require additional expertise in specific industries and areas applicable to the products developed through our technologies, including the life sciences and healthcare industries.

Thus, we will need to add new personnel, including management, and develop the expertise of existing management. The failure to do so could impair the growth of our business.

***Corporate governance rules, including those contained in and issued under the Sarbanes-Oxley Act of 2002, may make it difficult for us to retain or attract qualified officers and directors, which could adversely affect the management of our business and our ability to obtain or retain listing of our common stock.***

We may be unable to attract and retain those qualified officers, directors and members of Board of Directors committees required to provide for our effective management because of the changes in the rules and regulations that govern publicly held companies, including, but not limited to, certifications by principal executive officers. The enactment of Sarbanes-Oxley has resulted in the issuance of a series of rules and regulations and the strengthening of existing rules and regulations by the SEC, as well as the adoption of more stringent rules by the stock exchanges. The perceived increased personal risk associated with these recent changes may deter qualified individuals from accepting roles as directors and executive officers.

Further, some of these recent changes heighten the requirements for board or committee membership, particularly with respect to an individual's independence and level of experience in finance and accounting matters. We may have difficulty attracting and retaining directors with the requisite qualifications. If we are unable to attract and retain qualified officers and directors, the management of our business and our ability to obtain or retain the listing of our common stock on any stock exchange (assuming we elect to seek and are successful in obtaining such listing) could be adversely affected.

***We are a holding company that depends on cash flow from our wholly owned subsidiary to meet our obligations.***

After the Merger, we became a holding company with no material assets other than the stock of our wholly owned subsidiary. Accordingly, all our operations are conducted by Wafergen, our wholly owned subsidiary. We currently expect that the earnings and cash flow of our subsidiary will primarily be retained and used by it in its operations, including servicing any debt obligations it may have now or in the future.

***All of our former liabilities survived the Merger and there may be undisclosed liabilities that could have a negative impact on our financial condition.***

Pursuant to the Merger, we acquired the business of Wafergen as our sole line of business, and accordingly are not pursuing our prior business. Although due diligence activities were performed on us and Wafergen prior to the Merger, the due diligence process may not have revealed all liabilities (actual or contingent) of us or Wafergen that existed or which may arise in the future relating to our activities before the consummation of the Merger. Notwithstanding that all of our then-known liabilities were transferred to La Burbuja Leaseco pursuant to the split-off in connection with the Merger, it is possible that claims for liabilities may still be made against us, which we will be required to defend or otherwise resolve. The provisions and terms of the merger agreement and split-off may not be sufficient to protect us from claims and liabilities and any breaches of related representations and warranties. Although escrow provisions and limited post-closing adjustments in the merger agreement are available to the stockholders of Wafergen, Inc. and our pre-Merger stockholders, there is no comparable protection offered to our other stockholders. Any liabilities remaining from our pre-Merger company or Wafergen, Inc. could harm our financial condition.

***If we fail to maintain an effective system of internal controls, we may not be able to accurately report our financial results or detect fraud. Consequently, investors could lose confidence in our financial reporting and this may decrease the trading price of our stock.***

We must maintain effective disclosure and internal controls to provide reliable financial reports. We have been assessing our controls to identify areas that need improvement. Based on our evaluation as of December 31, 2010, we concluded that there were material weaknesses in our internal controls and procedures as of December 31, 2010. We are in the process of implementing improvements to our controls, but have not yet completed implementing these changes. Failure to implement these changes to our controls or any others that we identify as necessary to maintain an effective system of such controls could harm our operating results and cause investors to lose confidence in our reported financial information. Any such loss of confidence would have a negative effect on the trading price of our stock.

***Because we are not yet required to comply with rules requiring the adoption of certain corporate governance measures, our stockholders have limited protections against interested director transactions, conflicts of interest and similar matters.***

Sarbanes-Oxley, as well as rule changes proposed and enacted by the SEC, the New York and American Stock Exchanges and The NASDAQ Stock Market, as a result of Sarbanes-Oxley, require the implementation of various measures relating to



corporate governance. These measures are designed to enhance the integrity of corporate management and the securities markets and apply to securities which are listed on those exchanges. Because we are not presently required to comply with many of the corporate governance provisions, we have not yet adopted these measures.

Until we comply with the corporate governance measures adopted by the national securities exchanges after the enactment of Sarbanes-Oxley, regardless of whether such compliance is required, the absence of standards of corporate governance may leave our stockholders without protections against interested director transactions, conflicts of interest and similar matters and investors may be reluctant to provide us with funds in the future if we determine it is necessary to raise additional capital. We intend to comply with all applicable corporate governance measures relating to director independence as soon as practicable.

***Litigation or other proceedings or third-party claims of intellectual property infringement could require us to spend significant time and money and could prevent us from selling our products or services or adversely impact our stock price.***

Our commercial success depends in part on our non-infringement of the patents or proprietary rights of third parties and the ability to protect our own intellectual property.

Third parties may assert that we are employing their proprietary technology without authorization even if we are not. As we enter new markets, we expect that competitors will likely assert that our products infringe their intellectual property rights as part of a business strategy to impede our successful entry into those markets. Third parties such as Life Technologies Corporation, the Roche family of companies, Biometra biomedizinische Analytik GmbH, Bio-Rad Laboratories, Inc., Eppendorf AG, Enzo Biochem, Inc., Affymetrix, Inc., Illumina, Inc., Agilent Technologies, Inc. GE Healthcare, Beckman Coulter, Inc., Qiagen N.V., Idaho Technology, Inc., Caliper Life Sciences, Inc., Fluidigm Corporation, the Exiqon family of companies, Luminex Corporation, and others may have obtained and may in the future obtain patents and claim that manufacture, use and/or sale of our technologies, methods or products infringes these patents. We could incur substantial costs and divert the attention of our management and technical personnel in defending ourselves against these claims even if we are eventually successful in defending ourselves against these claims. Furthermore, parties making claims against us may be able to obtain injunctive or other relief, which effectively could block our ability to further develop, commercialize, manufacture, use and sell methods and products, and could result in the award of substantial damages against us. In the event of a successful claim of infringement against us, we may be required to pay damages and obtain one or more licenses from third parties, or be prohibited from making, using or selling certain methods and/or products. We may not be able to obtain these licenses at a reasonable cost, or at all. In that event, we could encounter delays in product introductions while we attempt to develop alternative methods or products. Defense of any lawsuit or failure to obtain any of these licenses on favorable terms could prevent us from commercializing products, and the prohibition of sale of any of our products could materially affect our ability to grow and to attain profitability.

***Our proprietary intellectual property rights may not adequately protect our products and technologies.***

Although we have filed a number of United States and international patent applications, we have three issued patents, which do not cover all of our products and technologies. Our commercial success will depend in part on obtaining and maintaining patent protection and trade secret protection for our products and technologies. Patent law relating to claims in the technology fields in which we operate is uncertain, so we cannot be assured the patent rights we have, or may obtain in future, will be valuable or enforceable. We may only be able to protect products and technologies from unauthorized use by third parties to the extent that valid and enforceable patents or trade secrets cover them. Furthermore, the degree of future protection of our proprietary rights is uncertain because legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep a competitive advantage.

The patent positions of life sciences companies can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. No consistent policy regarding the breadth of claims allowed in such companies' patents has emerged to date in the United States. The laws of some countries other than the United States do not protect intellectual property rights to the same extent as the laws of the United States, and many companies have encountered significant problems in protecting and defending such rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biotechnology and/or pharmaceuticals, which could make it difficult for us to stop the infringement of any patents we may obtain in such countries. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business. Changes in either the

patent laws or in interpretations of patent laws in the United States or other countries may diminish the value of our intellectual property. Accordingly, we cannot predict the breadth of claims that may be allowed or enforced in our patents or in third-party patents. For example:

- we might not have been the first to conceive or reduce to practice one or more inventions disclosed in our pending patent applications;
- we might not have been the first to file patent applications for these inventions;
- others may independently develop similar or alternative products and technologies or duplicate any of our products and technologies;
- it is possible that none of our pending patent applications will result in issued patents, and even if they issue as patents, they may not provide a basis for commercially viable products, and/or may not provide us with any competitive advantages, or may be challenged and invalidated by third parties;
- we may not develop additional proprietary products and technologies that are patentable; and
- third-party patents may have an adverse effect on our ability to continue to grow our business.

We have applied, and continue to apply, for patents covering our intellectual property (e.g., products and technologies and uses thereof), as we deem appropriate. However, we may fail to apply for patents on products and/or technologies in a timely fashion or at all.

We also rely on trade secrets to protect our technology, especially where we do not believe patent protection is appropriate or obtainable. However, trade secrets are difficult to protect. While we attempt to use reasonable efforts to protect our trade secrets, our employees, consultants, contractors, or scientific and other advisors may unintentionally or willfully disclose our information to competitors. If we were to attempt to enforce a claim that a third-party had illegally obtained and was using our trade secrets, it could be expensive and time consuming, and the outcome could be unpredictable. In addition, courts outside the United States are sometimes less willing to protect trade secrets than courts inside the United States. Moreover, if our competitors independently develop equivalent knowledge, methods and know-how, it may be difficult for us to enforce our intellectual property and our business could be harmed.

If we are not able to defend the patent or trade secret protection position of our products and technologies, then we may not be able to exclude competitors from developing or marketing competing products, and we may not generate enough revenue from product sales to justify the cost of development of our products and to achieve or maintain profitability.

***We may be unable to protect the intellectual property rights of the third parties from whom we license certain of our intellectual property or with whom we have entered into other strategic relationships, which could negatively impact our competitive advantage.***

None of our intellectual property rights are currently licensed from third parties but, in the future, we may have to license intellectual property from key strategic partners. We may become reliant upon such third parties to protect their intellectual property rights to any licensed technology. Such third parties may not protect the intellectual property rights that we license from them and we may be unable defend such intellectual property rights on our own or we may have to undertake costly litigation to defend the intellectual property rights of such third parties. There can be no assurances that we will continue to have proprietary rights to any of the intellectual property that we license from such third parties or otherwise have the right to use through similar strategic relationships. Any loss or limitations on use with respect to our right to use such intellectual property licensed from third parties or otherwise obtained from third parties or with whom we have entered into strategic relationships could negatively impact our competitive advantage.

***We expect intense competition in our target markets, which could render our products and/or technologies obsolete, result in significant price reductions or substantially limit the volume of products that we sell. This would limit our ability to compete and achieve and maintain profitability. If we cannot continuously develop and commercialize new products, our revenue may not grow as intended.***

Future competition will likely come from existing competitors as well as other companies seeking to develop new technologies for analyzing genetic information, such as next generation sequencing. Some of our competitors have various products and/or methodologies for gene detection, expression, characterization, and/or analyses that may be competitive with

our products and/or methodologies. In addition, pharmaceutical and biotechnology companies have significant needs for genomic information and may choose to develop or acquire competing technologies to meet these needs. In the molecular diagnostics field, competition will likely come from established diagnostic companies, companies developing and marketing DNA probe tests for genetic and other diseases and other companies conducting research on new technologies to ascertain and analyze genetic information. Further, in the event that we develop new technology and products that compete with existing technology and products of well-established companies, there can be no guarantee that the marketplace will readily adopt any such new technology and products that we may introduce in the future.

The market for genetic research and molecular diagnostic products is highly competitive, with several large companies already having significant market share. Established genetic research and diagnostic companies also have an installed base of instruments in several markets, including clinical and reference laboratories. In addition, these companies have formed alliances with genomics companies which provide them access to genetic information that may be incorporated into their diagnostic tests. We may not be able to compete effectively with these companies.

***Our manufacturing capacity may limit our ability to sell our products.***

We are in the process of developing the capacity to meet our anticipated demand for our products. There are uncertainties inherent in expanding our manufacturing capabilities and we may not be able to increase our capacity in a timely manner. For example, manufacturing and product quality issues may arise as we increase production rates at our manufacturing facility and launch new products. As a result, we may experience difficulties in meeting customer demand, in which case we could lose customers or be required to delay new product introductions, and demand for our products could decline. Due to the intricate nature of manufacturing products, we may encounter similar or previously unknown manufacturing difficulties in the future that could significantly reduce production yields, impact our ability to launch or sell these products, or to produce them economically, prevent us from achieving expected performance levels or cause us to set prices that hinder wide adoption by customers.

***If we are unable to develop and maintain our manufacturing capability, we may not be able to launch or support our products in a timely manner, or at all.***

We currently possess only one facility capable of manufacturing our products and services for both sale to our customers and internal use. If a natural disaster were to significantly damage our facility or if other events were to cause our operations to fail, these events could prevent us from developing and manufacturing our products and services. If our networks or storage infrastructure were to fail for an extended period of time, it would adversely impact our ability to manufacture our products on a timely basis and may prevent us from achieving our expected shipments in any given period.

***Our reliance on outside manufacturers and suppliers to provide certain instruments could subject us to risks that may harm our business.***

We are currently in the process of transferring some of our instrument manufacturing to vendors in Penang, Malaysia. In addition, from time to time we may change manufacturers, and any new manufacturer engaged by us may not perform as expected. If our vendors experience shortages or delays in their manufacture of our instruments, or if we experience quality problems with our vendors, then our shipment schedules could be significantly delayed or costs significantly increased. Certain of our instruments may be manufactured by a single vendor, which could magnify the risk of shortages.

***We may be adversely affected by environmental, health and safety laws, regulations and liabilities.***

As we pursue our business plan, we will become subject to a variety of federal, state and municipal environmental, health and safety laws based on our use of hazardous materials in both our manufacturing and research and development operations. These laws and regulations can often require expensive compliance procedures or operational changes to limit actual or potential impacts to the environment. A violation of these laws and regulations can result in substantial fines, criminal sanctions and/or operational shutdown. Furthermore, we may become liable for the investigation and cleanup of environmental contamination, whether intentional or unintentional, and we could be responsible for damages related to the clean-up of such contamination or individual injury caused by such contamination. We may also be subject to related claims by private parties alleging property damage and personal injury due to exposure to hazardous or other materials as a result of such contamination. Some of these matters may require expending significant amounts for investigation, cleanup or other costs. Events such as these could negatively impact our financial position.

***Our sales, marketing and technical support organization may limit our ability to sell our products.***

We currently have limited resources available for sales and marketing and technical support services as compared to some of our primary competitors. In order to effectively commercialize our gene expression systems and other products to follow, we will need to expand our sales, marketing and technical support staff both domestically and internationally. We may not be successful in establishing or maintaining either a direct sales force or distribution arrangements to market our products and services. In addition, we compete primarily with much larger companies that have larger sales and distribution staffs and a significant installed base of products in place, and the efforts from a limited sales and marketing force may not be sufficient to build the market acceptance of our products required to support continued growth of our business.

***We may be exposed to liability due to product defects.***

The risk of product liability claims is inherent in the testing, manufacturing, marketing and sale of research products for therapeutic and diagnostic development. We may seek to acquire additional insurance for clinical liability risks. We may not be able to obtain such insurance or general product liability insurance on acceptable terms or in sufficient amounts. A product liability claim or recall could negatively impact our financial position.

**Risks Related to Our Industry**

***Our success depends upon the continued emergence and growth of markets for analysis of genetic variation and biological function.***

We design our products primarily for applications in the life sciences and pharmaceutical industries. The usefulness of our technology depends in part upon the availability of genetic data and its usefulness in identifying or treating disease. We are initially focusing on markets for analysis of genetic variation and biological function, namely gene expression profiling. This market is new and emerging, and may not develop as quickly as we anticipate, or reach its full potential. Other methods of analysis of genetic variation and biological function may emerge and displace the methods we are developing. Also, researchers may not seek or be able to convert raw genetic data into medically valuable information through the analysis of genetic variation and biological function. In addition, factors affecting research and development spending generally, such as changes in the regulatory environment affecting life sciences and pharmaceutical companies, and changes in government programs that provide funding to companies and research institutions, could harm our business. If useful genetic data is not available or if our target markets do not develop in a timely manner, demand for our products may grow at a slower rate than we expect, and we may not be able to achieve or sustain profitability.

***We may not be able to deliver acceptable products to our customers due to the rapidly evolving nature of genetic sequence information upon which our products are based.***

The genetic sequence information upon which we may rely to develop and manufacture our products is contained in a variety of public and private databases throughout the world. These databases are rapidly expanding and evolving. In addition, the accuracy of such databases and resulting genetic research is dependent on various scientific interpretations, and it is not expected that global genetic research efforts will result in standardized genetic sequence databases for particular genomes in the near future.

Although we have implemented ongoing internal quality control efforts to help ensure the quality and accuracy of our products, the fundamental nature of our products requires us to rely on genetic sequence databases and scientific interpretations which are continuously evolving. As a result, these variables may cause us to develop and manufacture products that incorporate sequence errors or ambiguities. The magnitude and importance of these errors depends on multiple and complex factors that would be considered in determining the appropriate actions required to remedy any inaccuracies. Our inability to timely deliver acceptable products as a result of these factors would likely adversely affect our relationship with customers, and could negatively impact our financial condition.

***We face risks associated with technological obsolescence and emergence of standardized systems for genetic analysis.***

High throughput genetic analyses and quantitative detection methodologies (including, for example, PCR) is undergoing rapid evolution and technological changes. New technologies, techniques or products could emerge which might allow the packaging and analysis of genomic information at densities similar to, or even higher than, our existing or future technology. Other companies may begin to offer products that are directly competitive with, or are technologically superior to, our

products. There can be no assurance that we will be able to maintain our technological advantages over emerging technologies in the future. Over time, we will need to respond to technological innovation in a rapidly changing industry. Standardization of tools and systems for genetic research is still ongoing and there can be no assurance that our products will emerge as the standard for genetic research. The emergence of competing technologies and systems as market standards for genetic research may result in our products becoming uncompetitive which would have an adverse effect on our business.

***Our success depends on the continuous development of new products and our ability to manage the transition from our older products to new products.***

We compete in markets that are new, intensely competitive, highly fragmented and rapidly changing, and many of our current and potential competitors have significantly greater financial, technical, marketing and other resources than we do. In addition, many current and potential competitors have greater name recognition, more extensive customer bases and access to proprietary genetic content. The continued success of our products will depend on our ability to produce products with smaller feature sizes and create greater information capacity at our current or lower costs. The successful development, manufacture and introduction of our new products is a complicated process and depend on our ability to manufacture and supply enough products in sufficient quantity and quality and at acceptable cost in order to meet customer demand. If we fail to keep pace with emerging technologies or are unable to develop, manufacture and introduce new products, we will become uncompetitive, our pricing and margins will decline, and our business will suffer.

Our failure to successfully manage the transition between our older products and new products may adversely affect our financial results. As we introduce new or enhanced products, we must successfully manage the transition from older products to minimize disruption in customers' ordering patterns, avoid excessive levels of older product inventories and provide sufficient supplies of new products to meet customer demands. When we introduce new or enhanced products, we face numerous risks relating to product transitions, including the inability to accurately forecast demand and difficulties in managing different sales and support requirements due to the type or complexity of the new products.

***Ethical, legal and social concerns surrounding the use of genetic information could reduce demand for our products.***

Genetic testing has raised ethical issues regarding privacy and the appropriate uses of the resulting information. For these reasons, governmental authorities and others may call for limits on or regulation of the use of genetic testing or prohibit testing for genetic predisposition to certain conditions, particularly for those that have no known cure. Similarly, such concerns may lead individuals to refuse to use genetics tests even if permissible. Any of these scenarios could reduce the potential markets for our products.

**Risks Related to Our Organization**

***Even though we are not a California corporation, our common stock could still be subject to a number of key provisions of the California General Corporation Law.***

Under Section 2115 of the California General Corporation Law (CGCL), corporations not organized under California law may still be subject to a number of key provisions of the CGCL. This determination is based on whether the corporation has significant business contacts with California and if more than 50% of its voting securities of record are held by persons having addresses in California. In the immediate future, the majority of our business operations, revenue and payroll will be conducted in, derived from, and paid to residents of California. Therefore, depending on our ownership, we could be subject to some provisions of the CGCL. Among the more important provisions are those relating to the election and removal of directors, cumulative voting, standards of liability and indemnification of directors, distributions, dividends and repurchases of shares, stockholder meetings, approval of some corporate transactions, dissenters' and appraisal rights, and inspection of corporate records. If we are required to comply with these provisions, this compliance could cause us to incur additional administrative and legal expenses and divert our management's time and attention from the operation of our business.

***Because Wafergen has become public by means of a reverse merger, we may not be able to attract the attention of major brokerage firms.***

There may be risks associated with Wafergen's becoming a public company through a "reverse merger." Securities analysts of major brokerage firms may not provide coverage of us since there is no incentive to brokerage firms to recommend the purchase of our common stock. No assurance can be given that brokerage firms will, in the future, want to conduct any

secondary offerings on our behalf. Also, if securities analysts do not cover our common stock, the lack of research coverage may adversely affect its market price.

## **Risks Related to Our Common Stock**

***Our common stock has a limited bid history and prospective investors may not be able to resell their shares at their purchase price, if at all.***

Our common stock is currently available for trading in the over-the-counter market and is quoted on the OTC Bulletin Board under the symbol “WGBS.OB.” Prior to the closing of the Merger, there was no bid history for our common stock and there is no assurance that a regular trading market will develop or, if developed, will be sustained. We may never be able to satisfy the qualitative or quantitative listing requirements for our Common Stock to be listed on an exchange. These factors may severely limit the liquidity of our common stock, and may likely have a material adverse effect on the market price of our common stock and on our ability to raise additional capital.

The market price of the common stock has fluctuated significantly since it was first quoted on the OTC Bulletin Board on June 6, 2007. Since this date, through December 31, 2010, the price has fluctuated from a low of \$0.56 to a high of \$3.15. The price of our common stock may continue to fluctuate significantly in response to factors, some of which are beyond our control, including the following:

- actual or anticipated variations in operating results;
- the limited number of holders of the common stock, and the limited liquidity available through the OTC Bulletin Board;
- changes in financial estimates by securities analysts;
- changes in the economic performance and/or market valuations of other biotechnology companies;
- our announcement of significant acquisitions, strategic partnerships, joint ventures or capital commitments;
- additions or departures of key personnel; and
- sales or other transactions involving our capital stock.

***Our common stock may be considered “penny stock” and may be difficult to sell.***

The SEC has adopted regulations which generally define “penny stock” to be an equity security that has a market price of less than \$5.00 per share or an exercise price of less than \$5.00 per share, subject to specific exemptions. The market price of our common stock is currently less than \$5.00 per share and therefore is designated as a “penny stock” according to SEC rules. This designation requires any broker or dealer selling these securities to disclose some information concerning the transaction, obtain a written agreement from the purchaser and determine that the purchaser is reasonably suitable to purchase the securities. These rules may restrict the ability of brokers or dealers to sell the common stock and may affect the ability of investors to sell their shares. These regulations may likely have the effect of limiting the trading activity of our common stock and reducing the liquidity of an investment in our common stock. In addition, since the common stock is currently traded on the OTC Bulletin Board, investors may find it difficult to obtain accurate quotations of the common stock and may experience a lack of buyers to purchase our stock or a lack of market makers to support the stock price.

***Stockholders may experience dilution of their ownership interests because of the future issuance of additional shares of our common stock and our preferred stock.***

In the future, we may issue our authorized but previously unissued equity securities, resulting in the dilution of the ownership interests of our present stockholders. We are authorized to issue an aggregate of 310,000,000 shares of capital stock consisting of 300,000,000 shares of common stock, par value \$0.001 per share, of which 41,175,464 shares were issued and outstanding as of December 31, 2010, and 10,000,000 shares of “blank check” preferred stock, par value \$0.001 per share, of which no shares are issued and outstanding. The preferred stock will have preferences and rights as may be determined by our board of directors at the time of issuance. Specifically, our board of directors has the authority to issue preferred stock without further stockholder approval. As a result, our board of directors could authorize the issuance of a series of preferred

stock that would grant to holders the preferred right to our assets upon liquidation, the right to receive dividend payments before dividends are distributed to the holders of common stock and the right to the redemption of the shares, together with a premium, prior to the redemption of common stock. In addition, our board of directors could authorize the issuance of a series of preferred stock that has greater voting power than our common stock or that is convertible into common stock, which could decrease the relative voting power of the common stock or result in dilution to our existing stockholders. In addition, as of December 31, 2010, we have outstanding options to purchase an aggregate of 5,543,893 shares of our common stock and warrants to purchase an aggregate of 10,075,495 shares of our common stock, 3,864,937 of which have certain anti-dilution protections against future dilutive events (including the issuance of stock at a price below their exercise price). The future exercise of these options and warrants will subject our existing stockholders to experience dilution of their ownership interests. We may also issue additional shares of common stock or other securities that are convertible into or exercisable for common stock in connection with hiring or retaining employees, future acquisitions, future sales of our securities for capital raising purposes, or for other business purposes. The future issuance of any additional shares of our common stock may create downward pressure on the trading price of our common stock. There can be no assurance that we will not be required to issue additional shares, warrants or other convertible securities in the future in conjunction with any capital raising efforts, including at a price (or exercise prices) below the price at which shares of our common stock are then traded.

***Our principal stockholders will have significant voting power and may take actions that may not be in the best interests of other stockholders.***

Our officers and directors, and their affiliates, control approximately 16.7% of our outstanding common stock. In addition, our largest other stockholder and its affiliates controls approximately 7.0% of our outstanding common stock. If all of these stockholders act together, they will be able to exert significant control over our management and affairs requiring stockholder approval, including approval of significant corporate transactions. This concentration of ownership may have the effect of delaying or preventing a change in control and might adversely affect the market price of our common stock. This concentration of ownership may not be in the best interests of all our stockholders.

***Stockholders should not anticipate receiving cash dividends on our stock.***

We have never declared or paid any cash dividends or distributions on our capital stock. We currently intend to retain future earnings to support operations and to finance expansion and therefore do not anticipate paying any cash dividends on our common stock in the foreseeable future.

#### **Item 1B. Unresolved Staff Comments**

None.

#### **Item 2. Properties**

We do not own any real property. Our leased facilities as of December 31, 2010 are as follows:

<u>Location</u>	<u>Square Feet</u>	<u>Primary Use</u>	<u>Lease Terms</u>
Fremont, CA	19,186 sq ft	Corporate Office and Lab	Lease expires April 30, 2015
Fremont, CA	2,708 sq ft	Manufacturing	Leased month to month
Kulim, Malaysia	5,194 sq ft	Administration and Lab	Lease expires December 31, 2013

Our existing facilities are not yet being used at full capacity and management believes that these facilities are adequate and suitable for current needs, although further capacity may be required within the next year as the Company continues to grow.

**Item 3. Legal Proceedings**

From time to time we may be involved in claims arising in connection with our business. Based on information currently available, we believe that the amount, or range, of reasonably possible losses in connection with any pending actions against us, in excess of established reserves, in the aggregate, not to be material to our consolidated financial condition or cash flows. However, losses may be material to the Company's operating results for any particular future period, depending on the level of income for such period.

**Item 4. (Removed and Reserved)**



**PART II****Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities****Trading Information**

Our common stock is currently quoted on the OTC Bulletin Board maintained by the NASD under the symbol WGBS.OB. The transfer agent for our common stock is Continental Stock Transfer and Trust Company at 17 Battery Place, New York, NY 10004.

The following table sets forth the high and low intra-day bid information for our Common Stock for the fiscal quarters indicated as reported on the OTC Bulletin Board. The quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not represent actual transactions.

<b>2009</b>	<b>High</b>	<b>Low</b>
First Quarter ended March 31, 2009	1.30	0.65
Second Quarter ended June 30, 2009	2.15	0.80
Third Quarter ended September 30, 2009	2.20	1.29
Fourth Quarter ended December 31, 2009	2.87	1.45
<b>2010</b>		
First Quarter ended March 31, 2010	2.97	1.90
Second Quarter ended June 30, 2010	3.15	1.12
Third Quarter ended September 30, 2010	1.69	0.92
Fourth Quarter ended December 31, 2010	1.83	1.06

Our common stock is thinly traded and any reported sale prices may not be a true market-based valuation of our common stock. On December 31, 2010, the closing bid price of our common stock, as reported on the OTC Bulletin Board, was \$1.22.

As of March 29, 2011, there were approximately 137 holders of record of our common stock.

Trades in our common stock may be subject to Rule 15c-9 under the Exchange Act, which imposes requirements on broker/dealers who sell securities subject to the rule to persons other than established customers and accredited investors. For transactions covered by the rule, broker/dealers must make a special suitability determination for purchasers of the securities and receive the purchaser's written agreement to the transaction before the sale.

The SEC also has rules that regulate broker/dealer practices in connection with transactions in "penny stocks." Penny stocks generally are equity securities with a price of less than \$5.00 (other than securities listed on some national exchanges, provided that the current price and volume information with respect to transactions in that security is provided by the applicable exchange or system). The penny stock rules require a broker/dealer, before effecting a transaction in a penny stock not otherwise exempt from the rules, to deliver a standardized risk disclosure document prepared by the SEC that provides information about penny stocks and the nature and level of risks in the penny stock market. The broker/dealer also must provide the customer with current bid and offer quotations for the penny stock, the compensation of the broker/dealer and its salesperson in the transaction, and monthly account statements showing the market value of each penny stock held in the customer's account. The bid and offer quotations, and the broker/dealer and salesperson compensation information, must be given to the customer orally or in writing before effecting the transaction, and must be given to the customer in writing before or with the customer's confirmation. These disclosure requirements may have the effect of reducing the level of trading activity in the secondary market for shares of common stock.

**Dividend Policy**

We have never declared or paid dividends on shares of our common stock. We intend to retain future earnings, if any, to support the development of our business and therefore do not anticipate paying cash dividends for the foreseeable future. Payment of future dividends, if any, will be at the discretion of our board of directors after taking into account various factors, including current financial condition, operating results and current and anticipated cash needs.

## **Securities Authorized for Issuance under Equity Compensation Plans**

Information relating to our equity compensation plans is incorporated by reference to the definitive proxy statement for our 2011 annual meeting of stockholders. Additional information regarding our equity compensation plans is provided in Note 7 to our Consolidated Financial Statements in Part II, Item 8 in this Annual Report.

## **Recent Sales of Unregistered Securities**

Information with respect to equity securities of the Company sold by the Company during the period covered by this Annual Report that were not registered under the Securities Act has previously been provided in the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 17, 2010, and the Company's Current Reports on Form 8-K filed with the Securities and Exchange Commission on December 13, 2010, and December 15, 2010.

## **Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations**

*This discussion should be read in conjunction with the other sections of this Report, including Item 1 and Item 8 and the related exhibits. The various sections of this discussion contain a number of forward-looking statements, all of which are based on our current expectations and could be affected by the uncertainties and risk factors described throughout this Current Report on Form 10-K. See "Cautionary Factors That May Affect Future Results." Our actual results may differ materially.*

### **Company Overview**

WaferGen was incorporated in Delaware on October 22, 2002. WaferGen is engaged in the development, manufacture and sale of systems for gene expression, genotyping and stem-cell research for the life sciences, pharmaceutical drug discovery and biomarker discovery and diagnostic products industries. WaferGen's products are aimed at professionals who perform genetic analysis and cell biology, primarily at pharmaceutical and biotech companies, academic and private research centers and diagnostics companies involved in biomarker research. WaferGen plans to provide new performance standards with significant savings of time and cost for professionals in the field of gene expression research and to facilitate biomarker discovery, toxicology and clinical research through the SmartChip products and services.

WaferGen's revenue is subject to fluctuations due to the timing of sales of high-value products and service projects, the impact of seasonal spending patterns, the timing and size of research projects its customers perform, changes in overall spending levels in the life science industry and other unpredictable factors that may affect customer ordering patterns. Any significant delays in the commercial launch or any lack or delay of commercial acceptance of new products, unfavorable sales trends in existing product lines, or impacts from the other factors mentioned above, could adversely affect WaferGen's revenue growth or cause a sequential decline in quarterly revenue. Due to the possibility of fluctuations in WaferGen's revenue and net income or loss, WaferGen believes that quarterly comparisons of its operating results are not a good indication of future performance.

Since inception, WaferGen has incurred substantial operating losses. As of December 31, 2010, WaferGen's accumulated deficit was \$43,265,399 and the total stockholders' deficit was \$4,055,272. Losses have principally occurred as a result of the substantial resources required for the research, development, and manufacturing scale-up effort required to commercialize WaferGen's initial products and services. WaferGen expects to continue to incur substantial costs for research, development, and manufacturing scale-up activities over at least the next year. WaferGen will also need to increase its selling, general and administrative costs as it builds its sales and marketing infrastructure to expand and support the sale of systems, other products, and services.

We expect that the cash we have available, along with the net proceeds from the sale of Series C RCPS in our subsidiary, will fund our operations only through July 2011. We are currently considering several different financing alternatives to support the Company's operations thereafter. If we are unable to obtain such additional financing on a timely basis, we may have to curtail our development activities and growth plans and/or be forced to sell assets, perhaps on unfavorable terms, which would have a material adverse effect on our business, financial condition and results of operations, and ultimately could be forced to discontinue our operations and liquidate, in which event it is unlikely that stockholders would receive a distribution on their shares. See "Liquidity and Capital Resources" below.

## Results of Operations

### Year Ended December 31, 2010 Compared to Year Ended December 31, 2009

The following table presents selected items in our condensed consolidated statements of operations for the years ended December 31, 2010 and 2009, respectively:

	<b>Year Ended December 31,</b>	
	<b>2010</b>	<b>2009</b>
Revenue	\$ 2,167,289	\$ 379,373
Cost of revenue	862,066	263,041
Gross margin	1,305,223	116,332
Operating expenses:		
Sales and marketing	2,072,611	601,245
Research and development	6,714,340	5,142,083
General and administrative	5,097,797	4,383,082
Total operating expenses	13,884,748	10,126,410
Operating loss	(12,579,525)	(10,010,078)
Other income and (expenses):		
Interest income	17,536	14,493
Interest expense	(31,329)	(9,570)
Unrealized gain on fair value of put option, net	88,567	—
Unrealized gain (loss) on fair value of warrants, net	555,144	(564,122)
Miscellaneous expense	(137,774)	(51,211)
Total other income (expense)	492,144	(610,410)
Net loss before provision for income taxes	(12,087,381)	(10,620,488)
Provision for income taxes	—	—
Net loss	<u>\$ (12,087,381)</u>	<u>\$ (10,620,488)</u>

## Revenue

The following table represents our revenue for the years ended December 31, 2010 and 2009:

	<b>Year Ended December 31,</b>		
	<b>2010</b>	<b>2009</b>	<b>% Change</b>
\$	2,167,289	\$ 379,373	471%

For the year ended December 31, 2010, revenue increased by \$1,787,916, or 471%, as compared to the year ended December 31, 2009. The increase is primarily due to the first sales of our SmartChip Real-Time PCR Systems, including sample dispensers, Real-Time PCR Chip panels and fees from our Fee for Service business, accounting for 77%, 11% and 3% of total revenue, respectively. There was also a decrease in revenue of approximately \$209,000 from SmartSlide™ products, which accounted for 8% of revenue in the year ended December 31, 2010, compared to 100% in the year ended December 31, 2009. This 2010 revenue was mostly billed in the first quarter, and because the Company no longer promotes SmartSlide™ products, significant sales are not expected in the future.

**Cost of Revenue**

The following table represents our cost of revenue for the years ended December 31, 2010 and 2009:

Year Ended December 31,		
2010	2009	% Change
\$ 862,066	\$ 263,041	228%

Cost of revenue includes the cost of products paid to third party vendors and cost of raw materials, labor and overhead for products manufactured internally, and reserves for warranty and inventory obsolescence. For the year ended December 31, 2010, cost of revenue increased by \$599,025, or 228%, as compared to the year ended December 31, 2009. The increase related primarily to the increase in revenues from sales of SmartChip products and services, which generated no revenue in 2009, offset by the absence of a provision for obsolete SmartSlide™ products inventory, which represented 50% of cost of revenue in the year ended December 31, 2009. Gross margin for the year ended December 31, 2010, was 60%, as compared to 65%, after reversing the impact of the provision for obsolete inventory, for the year ended December 31, 2009. The margin in the year ended December 31, 2010, declined as 26% of our revenue came from sales of an externally manufactured system used with our SmartChip products that afforded a lower margin. The margin on the remainder of our revenue was 67%, as margins remained broadly consistent for our internally produced SmartChip products and services.

**Sales and Marketing Expenses**

The following table represents our sales and marketing expenses for the years ended December 31, 2010 and 2009:

Year Ended December 31,		
2010	2009	% Change
\$ 2,072,611	\$ 601,245	245%

Sales and marketing expenses consist primarily of compensation cost of our sales and marketing team, commissions, and the costs associated with various marketing programs. For the year ended December 31, 2010, sales and marketing expenses increased by \$1,471,366, or 245%, as compared to the year ended December 31, 2009. The increase resulted primarily from increases in salaries and wages, including commissions, non-cash stock compensation expense, consulting fees, travel and subsistence costs and facilities costs, which arose due to an increase in the head count of sales and marketing employees and consultants, and increases in promotional activities in conjunction with the commercialization and sales of our SmartChip products and services.

We expect selling expenses will continue to increase in the future as the Company increases its marketing activities for its SmartChip platform, and as the number of sales personnel, and their commissions, increase following the full commercialization of this product line.

**Research and Development Expenses**

The following table represents our research and development expenses for the years ended December 31, 2010 and 2009:

Year Ended December 31,		
2010	2009	% Change
\$ 6,714,340	\$ 5,142,083	31%

Research and development expenses consist primarily of salaries and other personnel-related expenses, laboratory supplies and other expenses related to the design, development, testing and enhancement of our products. Research and development expenses are expensed as they are incurred. For the year ended December 31, 2010, research and development expenses increased \$1,572,257, or 31%, as compared to the year ended December 31, 2009. The increase resulted primarily from increases in salaries and wages, expendable equipment and materials, and facilities costs, which arose due to an increase in the head count of employees, consumables used in SmartChip development, and an expansion in space occupied in conjunction with the development of SmartChip products and services, offset by a reduction in depreciation expense, which was high in 2009 as depreciation was accelerated on research equipment and tools and molds assessed as having no future benefit, and the receipt of a Section 48D award of approximately \$244,000 from the Internal Revenue Service.

We believe a substantial investment in research and development is essential in the long term to remain competitive and expand into additional markets. Accordingly, we expect our research and development expenses to remain at a high level of total expenditures as we grow.

### ***General and Administrative Expenses***

The following table represents our general and administrative expenses for the years ended December 31, 2010 and 2009:

<b>Year Ended December 31,</b>		
<b>2010</b>	<b>2009</b>	<b>% Change</b>
\$ 5,097,797	\$ 4,383,082	16%

Our general and administrative expenses consist primarily of personnel costs for finance, human resources, business development, and general management, as well as professional fees, such as expenses for legal and accounting services. For the year ended December 31, 2010, general and administrative expenses increased \$714,715, or 16%, as compared to the year ended December 31, 2009. The increase resulted primarily from increases in salaries and wages, non-cash stock compensation expense and consulting fees. These increases are due to higher personnel costs, mainly for senior management and consultants, including investor relations. The increases were offset by the absence of severance costs incurred in 2009 related to the departure of the Company's former Chief Technology Officer and Chief Financial Officer in 2009.

We expect our general and administrative expenses to increase as the Company expands its staff, develops its infrastructure and incurs additional costs to support the growth in its business.

### ***Interest Income***

The following table represents our interest income for the years ended December 31, 2010 and 2009:

<b>Year Ended December 31,</b>		
<b>2010</b>	<b>2009</b>	<b>% Change</b>
\$ 17,536	\$ 14,493	21%

The interest income is solely earned on cash balances held in interest-bearing bank accounts. For the year ended December 31, 2010, interest income increased \$3,043, or 21%, as compared to the year ended December 31, 2009. The increase was mainly due to an increase in the average cash invested in interest-bearing accounts, and a marginally higher interest rate.

### ***Interest Expense***

The following table represents our interest expense for the years ended December 31, 2010 and 2009:

<b>Year Ended December 31,</b>		
<b>2010</b>	<b>2009</b>	<b>% Change</b>
\$ 31,329	\$ 9,570	227%

For the year ended December 31, 2010, interest expense increased \$21,759, or 227%, as compared to the year ended December 31, 2009. The increase was mostly due to the term loan of \$2,000,000 obtained in December 2010, offset by a reduction in the balances outstanding on our capital leases. Interest expense (which includes the amortization of loan origination fees) will increase to approximately \$400,000 in 2011, as the term loan will be outstanding for the full year.

### ***Unrealized Gain on Fair Value of Put Option, net***

The following table represents the revaluation of the put option on Redeemable Convertible Preference Shares (“RCPS”) in our Malaysian subsidiary, WaferGen Biosystems (M) Sdn. Bhd. (“WGBM”) for the years ended December 31, 2010 and 2009:

<b>Year Ended December 31,</b>		
<b>2010</b>	<b>2009</b>	<b>% Change</b>
\$ 88,567	\$ —	N/A %

A revaluation gain or loss occurs due to the difference between the value of shares of common stock of the Company potentially issuable on the balance sheet date and the average of the share price for the ten previous days. The net gain from revaluation amounted to \$88,567 for the year ended December 31, 2010. There was no put option in 2009. The put option derivative liability of \$194,088 as at December 31, 2010, consists of an underlying liability of \$176,471, and an unrealized loss of \$17,617, which arises because the number of the Company’s shares that would be issued on exercise of the put option is based on the average closing stock price for the previous ten days, whereas the derivative liability is based on the Company’s closing stock price on the balance sheet date. Should the average closing stock price for the previous ten days and the Company’s closing stock price on the balance sheet date be equal on December 31, 2011, or on the date of conversion if earlier, we would record a gain on fair value of put option of \$17,617.

### ***Unrealized Gain (Loss) on Fair Value of Warrants, net***

The following table represents our unrealized gain (loss) on fair value of warrants, net for the years ended December 31, 2010 and 2009:

<b>Year Ended December 31,</b>		
<b>2010</b>	<b>2009</b>	<b>% Change</b>
\$ 555,144	\$ (564,122)	N/A %

FASB ASC 815-40 “*Derivatives and Hedging – Contracts in Entity’s own Equity*” became effective January 1, 2009 and required that derivative revaluations be recognized whenever the Company incurs a liability associated with the issuance of an equity-based instrument. The instrument is revalued for each reporting period until the liability is settled.

The net gain from warrant derivative revaluations for the year ended December 31, 2010, was \$555,144, compared to a net loss of \$564,122 for the year ended December 31, 2009. These gains and losses are directly attributed to revaluations of warrants and result primarily from a net decrease or increase in the Company’s stock price in the period. The stock price increased from \$1.18 at December 31, 2008 to \$2.18 at December 31, 2009, and then decreased to \$1.22 at December 31, 2010, and this was the primary driver of the loss in 2009 and the gain in 2010. In addition, as the expected term of the warrants decreases, the liability decreases. Conversely, the warrant derivative liability at December 31, 2010, increased due to a significant increase in the volatility of the Company’s stock, as volatility is now based 50% on the historic volatility of the Company’s own stock, as the Company’s shares have now been traded for longer than the expected remaining term of the warrants for all of the 3,864,937 warrants subject to revaluation. Also, there were only 3,489,979 warrants accounted for as derivative instruments as at December 31, 2009. By December 31, 2010, the number had risen to 3,864,937, and the exercise price of all of these warrants had decreased due to anti-dilution adjustments (mainly those resulting from the direct offering completed on July 7, 2010), so the total liability was higher as a result. With the present number of warrants, at our December 31, 2010, closing share price of \$1.22, an increase in our share price of \$0.10 would generate an unrealized loss in excess of \$270,000; conversely, a decrease in our share price of \$0.10 would generate an unrealized gain in excess of \$260,000. Should our share price increase by \$0.50, the sensitivity to changes in share price would increase even further.

**Miscellaneous Expense**

The following table represents our miscellaneous expense for the year ended December 31, 2010 and 2009:

Year Ended December 31,		
2010	2009	% Change
\$ 137,774	\$ 51,211	169%

For the year ended December 31, 2010, miscellaneous expense increased \$86,563, or 169%, as compared to the year ended December 31, 2009. Miscellaneous expense is the result of net foreign currency exchange losses in our Malaysian subsidiary, WGBM, mainly due to revaluation of the inter-company account at the balance sheet date. WGBM presently has a net liability on its dollar denominated balances, so as the value of the Malaysian Ringgit increases against the dollar, an expense is recorded.

**Liquidity and Capital Resources**

From inception through December 31, 2010, the Company raised a total of \$3,665,991 from the issuance of notes payable, \$66,037 from the sale of Series A Preferred Stock, \$1,559,942 from the sale of Series B Preferred Stock, \$31,216,991, net of offering costs, from the sale of common stock and warrants, \$3,789,953, net of offering costs, from the sale of redeemable convertible preference shares ("RCPS") in its Malaysian subsidiary, and \$1,842,760, net of origination fees, from a secured term loan. As of December 31, 2010, we had \$2,209,941 in unrestricted cash and cash equivalents, and working capital of \$1,780,027.

**Net Cash Used in Operating Activities**

The Company experienced negative cash flow from operating activities for the years ended December 31, 2010 and 2009 in the amounts of \$12,809,247 and \$7,832,332, respectively. The cash used in operating activities in the year ended December 31, 2010, was due to cash used to fund a net loss of \$12,087,381, adjusted for non-cash expenses related to depreciation and amortization, stock-based compensation, issuance of warrants for services, unrealized gain on fair value of warrants, exchange loss on issuance of RCPS, unrealized gain on fair value of put option and inventory provision totaling \$1,076,571, and cash used by a change in working capital of \$1,798,437. The cash used in operating activities in the year ended December 31, 2009 was due to cash used to fund a net loss of \$10,620,488, offset by non-cash expenses related to depreciation and amortization, stock-based compensation, issuance of warrants for services, unrealized loss on fair value of warrants, exchange loss, inventory provision and expensed equipment totaling \$2,205,776 and by cash provided from a change in working capital of \$582,380. The increase in cash used in the year ended December 31, 2010 compared to 2009 was driven primarily by the increase in the net operating loss from \$10,010,078 to \$12,579,525 and an increase in current assets (excluding unrestricted cash) from \$437,537 to \$2,079,929.

**Net Cash Used in Investing Activities**

The Company used \$1,120,808 in the year ended December 31, 2010, and \$263,291 in the year ended December 31, 2009, to acquire property and equipment. The cash used in the year ended December 31, 2010 includes the cost of leasehold improvements of \$77,412 related to our office move. The cash used in the year ended December 31, 2009 includes the cost of equipment of \$123,998, which was capitalized, but not depreciated, at March 31, 2009, and was reassessed and expensed as research and development in the three months ended June 30, 2009.

**Net Cash Provided by Financing Activities**

Cash provided by financing activities in the year ended December 31, 2010, was \$9,977,729.

In January 2010, the Company received net cash of \$47,901 (after offering expenses of \$65,874 and a selling agent commission of \$9,225) from the final tranche of the sale in a private placement offering of 82,000 shares of common stock and warrants to purchase 20,500 shares of common stock with an exercise price of \$2.50 per share. In July 2010, the Company received net cash of \$6,823,472 (after offering expenses of \$134,328 and a selling agent commission of \$244,200) from the final tranche of the sale in a private placement offering of 6,001,667 shares of common stock and warrants to

purchase 3,000,830 shares of common stock with an exercise price of \$1.55 per share. In March 2010, the Company's Malaysian subsidiary received \$238,066, net of issuance costs and a currency exchange loss, in exchange for the issuance of 111,111 Series B RCPS, and in May 2010, the Company's Malaysian subsidiary received \$495,000, net of issuance costs, in exchange for the issuance of 222,222 Series B RCPS. The Company also received \$43,122 from the exercise of stock options in March, April, June, September and November 2010 and \$562,500 from the exercise of warrants in April 2010. The Company also received \$1,842,760 (net of issuance costs of \$157,240) from a term loan. This was offset by payments of \$21,663 on capital lease obligations, \$44,793 in income taxes for restricted stock forfeited and \$8,636 in costs for issuing common stock in exchange for RCPS.

Cash provided by financing activities in the year ended December 31, 2009 was \$11,401,545.

In June 2009, the Company received net cash of \$3,764,169 (after offering expenses of \$206,825 and a selling agent commission of \$160,256) from the sale in a private placement offering of 3,305,000 shares of common stock and warrants to purchase 991,500 shares of common stock with an exercise price of \$2.00 per share. In August 2009, the Company received further net cash of \$1,884,351 (after offering expenses of \$96,549 and a selling agent commission of \$149,100) from the sale of an additional 1,704,000 shares of common stock and warrants to purchase 511,200 shares of common stock with an exercise price of \$2.00 per share. The warrants have a five-year term and standard broad-based weighted-average anti-dilution protection. In December 2009, the Company received net cash of \$4,546,341 (after offering expenses of \$43,964 and a selling agent commission of \$372,195) from the sale in a private placement offering of 3,308,335 shares of common stock and warrants to purchase 827,085 shares of common stock with an exercise price of \$2.50 per share. These warrants also have a five-year term and standard broad-based weighted-average anti-dilution protection. In addition, in June 2009 the Company received \$100,168 when 71,041 warrants were exercised at a price of \$1.41 per share. Further, WaferGen received \$39,976 from the exercise of stock options in August and December 2009.

Also, in June 2009, the Company's Malaysian subsidiary, WGBM, received \$212,578, net of issuance costs and a currency exchange loss, in exchange for the issuance of 111,111 Series B RCPS, and in September 2009, WGBM received further net cash of \$904,309, net of issuance costs, in exchange for the issuance of a further 410,279 Series B RCPS (See Note 6 to the Consolidated Financial Statements in Part II, Item 8 for more information related to RCPS). This was offset by repayments on capital leases for equipment of \$50,347.

#### *Availability of Additional Funds*

We believe funds available at December 31, 2010, along with the net proceeds from the subsequent sale of Series C RCPS in our subsidiary, (See Note 15 to the Consolidated Financial Statements in Part II, Item 8, for further information), will fund our operations through July 2011. Thereafter, we expect we will need to raise further capital, through the sale of additional equity securities or otherwise, to support the Company's future operations. Our operating needs include the planned costs to operate our business, including amounts required to fund working capital and capital expenditures. At the present time, we have commitments for capital expenditures totaling approximately \$300,000, all for equipment to be used in manufacturing SmartChip products. Our future capital requirements and the adequacy of our available funds will depend on many factors, including our ability to successfully commercialize our SmartChip products and services, competing technological and market developments, and the need to enter into collaborations with other companies or acquire other companies or technologies to enhance or complement our product and service offerings.

While we believe we have sufficient cash to fund our operating, investing, and financing activities in the near term, we expect that additional working capital will be needed to fund the commercialization and manufacture of our SmartChip products and services which are currently foreseen by management. We may be unable to raise sufficient additional capital when we need it or to raise capital on favorable terms. The conversion of RCPS in our subsidiary, and the sale of equity or convertible debt securities in the future, may be dilutive to our stockholders, and debt financing arrangements may require us to pledge certain assets and enter into covenants that could restrict certain business activities or our ability to incur further indebtedness, and may contain other terms that are not favorable to us or our stockholders. If we are unable to obtain adequate funds on reasonable terms, we may be required to curtail operations significantly or to obtain funds by entering into financing agreements on unattractive terms.

#### **Off-Balance Sheet Arrangements**

We have no off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, result of operations, liquidity, capital expenditures or capital resources that is material to stockholders.



## Critical Accounting Policies and Estimates

**Deferred Tax Valuation Allowance.** We believe significant uncertainties exist regarding the future realization of deferred tax assets, and accordingly, a full valuation allowance is required, which amounts to \$17,488,497 at December 31, 2010. In subsequent periods, if and when we generate pre-tax income, a tax expense will not be recorded to the extent that the remaining valuation allowance can be used to offset that expense. Once a consistent pattern of pre-tax income is established or other events occur that indicate that the deferred tax assets will be realized, some or all of the existing valuation allowance will be reversed back to income. Should we generate pre-tax losses in subsequent periods, a tax benefit will not be recorded and the valuation allowance will be increased.

**Inventory Valuation.** Inventories are stated at the lower of cost and market value. We perform a detailed assessment of inventory at each balance sheet date, which includes, among other factors, a review of demand requirements and product lifecycle. Inventory valuation provisions are assessed on the amount of inventory, on a line by line basis, for which quantities on hand exceed of one year's projected demand. As a result of this assessment, we write down inventory for estimated obsolescence or unmarketable inventory equal to the difference between the cost of the inventory and the estimated liquidation value based upon assumptions about future demand and market conditions. If actual demand and market conditions are less favorable than those projected by management, additional inventory write-downs may be required.

**Warranty Reserve.** Our standard warranty agreement is one year from shipment for SmartChip cyclers and nano-dispensers. We accrue for anticipated warranty costs upon shipment of these products. Our warranty reserve is based on management's judgment regarding anticipated rates of warranty claims and associated repair costs, and we update our assessment quarterly.

**Stock-Based Compensation.** We measure the fair value of all stock option and restricted stock awards to employees on the grant date, and record the fair value of these awards, net of estimated forfeitures, as compensation expense over the service period. The fair value of options is estimated using the Black-Scholes valuation model, and of restricted stock is based on the Company's closing share price on the measurement date. Amounts expensed with respect to options were \$525,712 and \$562,718 of the years ended December 31, 2010 and 2009, respectively, net of estimated annual forfeitures of 6% in each year. These sums exclude the compensation expense for restricted stock awards, for which the fair value is based on our closing stock price on the grant date for directors and employees, and on the dates on which performance of services is recognized for consultants.

The weighted-average grant date fair value of options awarded in the years ended December 31, 2010 and 2009, respectively, were \$0.70 and \$0.56. These fair values were estimated using the following assumptions:

	Year Ended December 31,	
	2010	2009
Risk-free interest rate	1.05% - 2.51%	1.31% - 2.97%
Expected term	4.75 Years	4.75 Years
Expected volatility	42.40% - 43.01%	40.04% - 42.22%
Dividend yield	0%	0%

**Risk-Free Interest Rate.** This is the United States Treasury rate for the day of the grant having a term equal to the expected term of the option. An increase in the risk-free interest rate will increase the fair value and the related compensation expense.

**Expected Term.** This is the period of time over which the award is expected to remain outstanding and is based on management's estimate, taking into consideration the vesting terms, the contractual life, and historical experience. An increase in the expected term will increase the fair value and the related compensation expense.

**Expected Volatility.** This is a measure of the amount by which the stock price has fluctuated or is expected to fluctuate. Since the Company's stock has not been traded for as long as the expected term of the options, the Company uses a weighted-average of the historic volatility of four comparable companies over the retrospective period corresponding to the expected life of the Company's own options on the grant date. Extra weighting is attached to those companies most similar in terms of size and business activity. An increase in the expected volatility will increase the fair value and the related compensation expense.

**Dividend Yield.** The Company has not made any dividend payments nor does it have plans to pay dividends in the foreseeable future. An increase in the dividend yield will decrease the fair value and the related compensation expense.

**Forfeiture Rate.** This is a measure of the amount of awards that are expected to not vest. An increase in the estimated forfeiture rates will decrease the related compensation expense.

**Warrant Derivative Liabilities.** We evaluate our warrants to determine whether they are indexed to our common stock, and if it is determined that they are not, they are treated as derivatives. We have determined that all of the warrants that we have issued which contain an anti-dilution provision are not indexed to our stock. We measure the fair value of these warrants at the dates of issuance, and at each period end, to determine the associated derivative liability.

At these measurement dates, we estimate the fair values of these securities using a Monte Carlo Simulation approach, using critical assumptions provided by management reflecting conditions at the valuation date. The fair value of warrants as at December 31, 2010, ranged from \$0.32 to \$0.69, and at December 31, 2009, ranged from \$0.52 to \$0.97.

Fair values at measurement dates during the years ended December 31, 2010 and 2009, were estimated using the following assumptions:

	Year Ended December 31,	
	2010	2009
Risk-free interest rate	0.47% - 2.16%	1.16% - 2.20%
Expected remaining term	1.91 - 4.00 Years	2.71 - 4.00 Years
Expected volatility	43.83% - 92.67%	43.26% - 49.78%
Dividend yield	0%	0%
Private Placement discount to stock price	10% - 15%	15%

**Risk-Free Interest Rate.** This is the United States Treasury rate for the measurement date having a term equal to the expected remaining term of the warrant. An increase in the risk-free interest rate will increase the fair value and the associated derivative liability.

**Expected Remaining Term.** This is the period of time over which the warrant is expected to remain outstanding and is based on management's estimate, taking into consideration the remaining contractual life, and historical experience. An increase in the expected remaining term will increase the fair value and the associated derivative liability.

**Expected Volatility.** This is a measure of the amount by which the stock price has fluctuated or is expected to fluctuate. To the extent that Company's stock has not been traded for as long as the expected remaining term of the warrants, the Company uses a weighted-average of the historic volatility of four comparable companies over the retrospective period corresponding to the expected remaining term of the warrants on the measurement date. Extra weighting is attached to those companies most similar in terms of size and business activity. To the extent that Company's stock has been traded for longer expected remaining term of the warrants, this weighted average is used to determine 50% of the volatility, with the Company's own historic volatility used to determine the remaining 50%. An increase in the expected volatility will increase the fair value and the associated derivative liability.

**Dividend Yield.** The Company has not made any dividend payments nor does it have plans to pay dividends in the foreseeable future. An increase in the dividend yield will decrease the fair value and the associated derivative liability.

**Private Placement Discount to Stock Price.** This is the percentage amount by which future stock offerings are expected to be priced at a discount from the trading price of our common stock at the offering closing dates, and is based on management's estimate, taking into consideration future expectations and historical experience. An increase in the expected discount to stock price will increase the fair value and the associated derivative liability.

## Contractual Obligations

In October, 2009, the Company signed an operating lease for 19,186 square feet of office and laboratory space for our new headquarters in Fremont, California, covering the period November 1, 2009 through April 30, 2015, with no rent payable for the first six months. The total expenditure commitment is approximately \$2.21 million (of which \$1.96 million remains as at December 31, 2010), plus maintenance fees.

## Recently Issued Accounting Pronouncements

See the “Recent Accounting Pronouncements” in Note 2 to the Consolidated Financial Statements in Part II, Item 8 for information related to the adoption of new accounting standards in 2010, none of which had a material impact on our financial statements, and the future adoption of recently issued accounting pronouncements, which we do not expect will have a material impact on our financial statements.

## Cautionary Factors That May Affect Future Results

This Report and other written reports and oral statements made from time to time by the Company may contain so-called “forward-looking statements,” all of which are subject to risks and uncertainties. One can identify these forward-looking statements by their use of words such as “expects,” “plans,” “will,” “estimates,” “forecasts,” “projects” and other words of similar meaning. One can identify them by the fact that they do not relate strictly to historical or current facts. These statements are likely to address the Company’s growth strategy, financial results and product and development programs. One must carefully consider any such statement and should understand that many factors could cause actual results to differ from the Company’s forward-looking statements. These factors include inaccurate assumptions and a broad variety of other risks and uncertainties, including some that are known and some that are not. No forward-looking statement can be guaranteed and actual future results may vary materially.

Information regarding market and industry statistics contained in this Report is included based on information available to the Company that it believes is accurate. It is generally based on industry and other publications that are not produced for purposes of securities offerings or economic analysis. The Company has not reviewed or included data from all sources, and cannot assure investors of the accuracy or completeness of the data included in this Report. Forecasts and other forward-looking information obtained from these sources are subject to the same qualifications and the additional uncertainties accompanying any estimates of future market size, revenue and market acceptance of products and services. The Company does not assume the obligation to update any forward-looking statement. You should carefully evaluate such statements in light of factors described in the Company’s filings with the SEC, especially on Forms 10-K, 10-Q and 8-K. In various filings the Company has identified important factors that could cause actual results to differ from expected or historic results. You should understand that it is not possible to predict or identify all such factors. Consequently, the reader should not consider any such list to be a complete list of all potential risks or uncertainties.

## Item 8. Financial Statements and Supplementary Data

<b>Index to Consolidated Financial Statements</b>	<b>Page</b>
<a href="#">Report of Independent Registered Public Accounting Firm</a>	<a href="#">34</a>
<a href="#">Consolidated Balance Sheets</a>	<a href="#">35</a>
<a href="#">Consolidated Statements of Operations</a>	<a href="#">36</a>
<a href="#">Consolidated Statements of Series B Preferred Stock and Stockholders’ Equity (Deficit)</a>	<a href="#">37</a>
<a href="#">Consolidated Statements Stockholders’ Equity (Deficit) and Comprehensive Income (Loss)</a>	<a href="#">40</a>
<a href="#">Consolidated Statements of Cash Flows</a>	<a href="#">44</a>
<a href="#">Notes to the Consolidated Financial Statements</a>	<a href="#">45</a>

**Report of Independent Registered Public Accounting Firm**

The Board of Directors and Stockholders of  
WaferGen Bio-systems, Inc.:

We have audited the accompanying consolidated balance sheets of WaferGen Bio-systems, Inc. (a development stage company) (the “Company”) as of December 31, 2010 and 2009, and the related consolidated statements of operations, Series B preferred stock and stockholders’ equity (deficit) and comprehensive income (loss), and cash flows for the years then ended and for the period from October 22, 2002 (inception) to December 31, 2010. These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with 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 consolidated financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis of designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2010 and 2009, and the results of their operations and their cash flows for the years then ended and for the period from October 22, 2002 (inception) to December 31, 2010, in conformity with accounting principles generally accepted in the United States of America.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As shown in the consolidated financial statements, the Company has incurred net losses since its inception and has experienced liquidity problems. Those conditions raise substantial doubt about the Company’s ability to continue as a going concern. Management’s plans in regarding to those matters are described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

*/s/ Rowbotham & Company LLP*

San Francisco, California  
March 31, 2011

**WAFERGEN BIO-SYSTEMS, INC.**  
(A Development Stage Company)

**Consolidated Balance Sheets**

	<b>December 31, 2010</b>	<b>December 31, 2009</b>
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 2,209,941	\$ 5,953,639
Restricted cash	100,651	—
Accounts receivable	778,769	258,855
Inventories, net	1,024,250	39,970
Prepaid expenses and other current assets	176,259	138,712
Total current assets	4,289,870	6,391,176
Property and equipment, net	1,191,840	441,996
Other assets	334,855	57,982
Total assets	<u>\$ 5,816,565</u>	<u>\$ 6,891,154</u>
<b>Liabilities and Stockholders' Equity (Deficit)</b>		
Current liabilities:		
Accounts payable	\$ 1,196,861	\$ 1,240,397
Accrued rent	98,057	10,493
Accrued payroll	268,686	241,586
Accrued severance pay	18,260	371,596
Accrued vacation	153,155	117,619
Deferred revenue	25,000	—
Warranty reserve	36,850	—
Accrued other expenses	293,590	157,699
Current portion of long-term debt	419,384	21,663
Total current liabilities	2,509,843	2,161,053
Long-term debt, net of current portion	1,589,468	8,852
Put option derivative liability	194,088	—
Warrant derivative liability	2,240,962	2,778,191
Redeemable convertible preference shares in subsidiary	3,337,476	3,290,994
Commitments and contingencies	—	—
Stockholders' equity (deficit):		
Preferred Stock, \$0.001 par value; 10,000,000 shares authorized; no shares issued and outstanding	—	—
Common Stock: \$0.001 par value; 300,000,000 shares authorized; 41,175,464 and 33,387,857 shares issued and outstanding at December 31, 2010 and December 31, 2009	41,175	33,388
Additional paid-in capital	38,881,075	29,017,578
Deficit accumulated during the development stage	(43,265,399)	(30,462,283)
Accumulated other comprehensive income	287,877	63,381
Total stockholders' equity (deficit)	(4,055,272)	(1,347,936)
	<u>\$ 5,816,565</u>	<u>\$ 6,891,154</u>

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

**WAFERGEN BIO-SYSTEMS, INC.**  
(A Development Stage Company)

**Consolidated Statements of Operations**

	Year Ended December 31,		Period From
	2010	2009	October 22, 2002 (Inception) to December 31, 2010
Revenue	\$ 2,167,289	\$ 379,373	\$ 3,462,796
Cost of revenue	862,066	263,041	1,467,006
Gross margin	1,305,223	116,332	1,995,790
Operating expenses:			
Sales and marketing	2,072,611	601,245	4,854,870
Research and development	6,714,340	5,142,083	22,552,813
General and administrative	5,097,797	4,383,082	16,871,033
Total operating expenses	13,884,748	10,126,410	44,278,716
Operating loss	(12,579,525)	(10,010,078)	(42,282,926)
Other income and (expenses):			
Interest income	17,536	14,493	277,394
Interest expense	(31,329)	(9,570)	(352,783)
Unrealized gain on fair value of put option, net	88,567	—	88,567
Unrealized gain (loss) on fair value of warrants, net	555,144	(564,122)	(8,978)
Miscellaneous expense	(137,774)	(51,211)	(267,489)
Total other income and (expenses)	492,144	(610,410)	(263,289)
Net loss before provision for income taxes	(12,087,381)	(10,620,488)	(42,546,215)
Provision for income taxes	—	—	—
Net loss	(12,087,381)	(10,620,488)	(42,546,215)
Cumulative effect of reclassification of warrants	—	—	368,627
Accretion on Redeemable Convertible Preference Shares in subsidiary associated with premium	(286,948)	(178,162)	(503,026)
Accretion on Redeemable Convertible Preference Shares in subsidiary associated with beneficial conversion feature	(428,787)	—	(428,787)
Accretion on Series B Preferred Stock	—	—	(155,998)
Net loss applicable to common stockholders	\$ (12,803,116)	\$ (10,798,650)	\$ (43,265,399)
Net loss per share - basic and diluted	\$ (0.35)	\$ (0.39)	
Shares used to compute net loss per share - basic and diluted	37,070,406	27,378,293	

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

**WAFERGEN BIO-SYSTEMS, INC.**  
(A Development Stage Company)

**Consolidated Statements of Series B Preferred Stock and Stockholders' Equity (Deficit)**

	<b>Series B Preferred Stock</b>		<b>Series A Preferred Stock</b>		<b>Common Stock</b>		<b>Additional Paid-in Capital</b>	<b>Accumulated Deficit</b>	<b>Total</b>
	<b>Shares</b>	<b>Amount</b>	<b>Shares</b>	<b>Amount</b>	<b>Shares</b>	<b>Amount</b>			
Balances as of January 1, 2002	—	\$ —	—	\$ —	—	\$ —	\$ —	\$ —	\$ —
Net loss	—	—	—	—	—	—	—	—	—
Balances as of December 31, 2002	—	\$ —	—	\$ —	—	\$ —	\$ —	\$ —	\$ —

	<b>Series B Preferred Stock</b>		<b>Series A Preferred Stock</b>		<b>Common Stock</b>		<b>Additional Paid-in Capital</b>	<b>Accumulated Deficit</b>	<b>Total</b>
	<b>Shares</b>	<b>Amount</b>	<b>Shares</b>	<b>Amount</b>	<b>Shares</b>	<b>Amount</b>			
Balances as of January 1, 2003	—	\$ —	—	\$ —	—	\$ —	\$ —	\$ —	\$ —
Net loss	—	—	—	—	—	—	—	(533,985)	(533,985)
Balances as of December 31, 2003	—	\$ —	—	\$ —	—	\$ —	\$ —	(533,985)	\$ (533,985)

	<b>Series B Preferred Stock</b>		<b>Series A Preferred Stock</b>		<b>Common Stock</b>		<b>Additional Paid-in Capital</b>	<b>Accumulated Deficit</b>	<b>Total</b>
	<b>Shares</b>	<b>Amount</b>	<b>Shares</b>	<b>Amount</b>	<b>Shares</b>	<b>Amount</b>			
Balances as of January 1, 2004	—	\$ —	—	\$ —	—	\$ —	\$ —	(533,985)	\$ (533,985)
Issuance of Common Stock in June for cash	—	—	—	—	2,483,610	2,484	(2,024)	—	460
Stock-based compensation	—	—	—	—	—	—	1,242	—	1,242
Net loss	—	—	—	—	—	—	—	(1,124,360)	(1,124,360)
Balances as of December 31, 2004	—	\$ —	—	\$ —	2,483,610	\$ 2,484	\$ (782)	(1,658,345)	\$ (1,656,643)

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

**WAFERGEN BIO-SYSTEMS, INC.**  
(A Development Stage Company)

**Consolidated Statements of Series B Preferred Stock and Stockholders' Equity (Deficit)**

	<b>Series B Preferred Stock</b>		<b>Series A Preferred Stock</b>		<b>Common Stock</b>		<b>Additional Paid-in Capital</b>	<b>Accumulated Deficit</b>	<b>Total</b>
	<b>Shares</b>	<b>Amount</b>	<b>Shares</b>	<b>Amount</b>	<b>Shares</b>	<b>Amount</b>			
Balances as of January 1, 2005	—	\$ —	—	\$ —	2,483,610	\$ 2,484	\$ (782)	\$ (1,658,345)	\$ (1,656,643)
Issuance of Series A Preferred Stock in February upon conversion of notes payable and accrued interest	—	—	5,915,219	592	—	—	3,134,481	—	3,135,073
Issuance of Common Stock in September for cash	—	—	—	—	917,856	918	(748)	—	170
Stock-based compensation	—	—	—	—	—	—	8,575	—	8,575
Net loss	—	—	—	—	—	—	—	(1,494,449)	(1,494,449)
Balances as of December 31, 2005	—	\$ —	5,915,219	\$ 592	3,401,466	\$ 3,402	\$ 3,141,526	\$ (3,152,794)	\$ (7,274)
	<b>Series B Preferred Stock</b>		<b>Series A Preferred Stock</b>		<b>Common Stock</b>		<b>Additional Paid-in Capital</b>	<b>Accumulated Deficit</b>	<b>Total</b>
	<b>Shares</b>	<b>Amount</b>	<b>Shares</b>	<b>Amount</b>	<b>Shares</b>	<b>Amount</b>			
Balances as January 1, 2006	—	\$ —	5,915,219	\$ 592	3,401,466	\$ 3,402	\$ 3,141,526	\$ (3,152,794)	\$ (7,274)
Issuance of Common Stock in January for cash	—	—	—	—	4,049	4	(3)	—	1
Issuance of Series B Preferred Stock in February for cash	2,052,552	1,559,942	—	—	—	—	—	—	—
Issuance of restricted shares in March for services	—	—	—	—	24,296	24	(24)	—	—
Issuance of Common Stock in June for cash	—	—	—	—	8,099	8	(7)	—	1
Issuance of restricted shares in July for services	—	—	—	—	10,798	11	(11)	—	—
Issuance of restricted shares in August for services	—	—	—	—	16,197	16	(16)	—	—
Issuance of Common Stock in August for cash	—	—	—	—	17,007	17	(14)	—	3
Accretions on Series B Preferred Stock	—	104,000	—	—	—	—	—	(104,000)	(104,000)
Issuance of restricted shares in November for services	—	—	—	—	5,399	5	(5)	—	—
Issuance of Common Stock in November for cash	—	—	—	—	8,639	9	(7)	—	2
Stock-based compensation	—	—	—	—	—	—	642,076	—	642,076
Net loss	—	—	—	—	—	—	—	(2,686,451)	(2,686,451)
Balances as of December 31, 2006	2,052,552	\$ 1,663,942	5,915,219	\$ 592	3,495,950	\$ 3,496	\$ 3,783,515	\$ (5,943,245)	\$ (2,155,642)

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



**WAFERGEN BIO-SYSTEMS, INC.**  
(A Development Stage Company)

**Consolidated Statements of Series B Preferred Stock and Stockholders' Equity (Deficit)**

	<b>Series B Preferred Stock</b>		<b>Series A Preferred Stock</b>		<b>Common Stock</b>		<b>Additional Paid-in Capital</b>	<b>Accumulated Deficit</b>	<b>Total</b>
	<b>Shares</b>	<b>Amount</b>	<b>Shares</b>	<b>Amount</b>	<b>Shares</b>	<b>Amount</b>			
Balances as of January 1, 2007	2,052,552	\$ 1,663,942	5,915,219	\$ 592	3,495,950	\$ 3,496	\$ 3,783,515	\$ (5,943,245)	\$ (2,155,642)
Issuance of Common Stock in January for cash	—	—	—	—	26,996	27	473	—	500
Issuance of restricted shares in January for services	—	—	—	—	134,979	135	(135)	—	—
Issuance of Series A Preferred Stock in February for cash	—	—	471,698	47	—	—	65,990	—	66,037
Issuance of WaferGen Bio-systems, Inc. Common Stock to WaferGen, Inc.'s Preferred shareholders in May	(2,052,552)	(1,715,940)	(6,386,917)	(639)	4,556,598	4,557	1,712,022	—	1,715,940
Issuance of Units for cash and notes payable in May and June, net of offering costs of \$1,917,956	—	—	—	—	8,008,448	8,008	10,086,704	—	10,094,712
WaferGen Bio-systems, Inc. shares outstanding	—	—	—	—	11,277,782	11,278	(11,278)	—	—
Common Stock canceled in May in accordance with Split-Off Agreement	—	—	—	—	(4,277,778)	(4,278)	4,278	—	—
Issuance of warrants in May and June to a placement agent	—	—	—	—	—	—	66,319	—	66,319
Issuance of warrants with debt in January, February and March	—	—	—	—	—	—	171,053	—	171,053
Stock-based compensation	—	—	—	—	—	—	648,988	—	648,988
Accretions on Series B Preferred Stock	—	51,998	—	—	—	—	—	(51,998)	(51,998)
Common Stock canceled in July	—	—	—	—	(5,129)	(5)	—	—	(5)
Net loss	—	—	—	—	—	—	—	(5,957,664)	(5,957,664)
Balances as of December 31, 2007	—	\$ —	—	\$ —	23,217,846	\$ 23,218	\$ 16,527,929	\$ (11,952,907)	\$ 4,598,240

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

**WAFERGEN BIO-SYSTEMS, INC.**  
(A Development Stage Company)

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

	<b>Preferred Stock</b>		<b>Common Stock</b>		<b>Additional Paid-in Capital</b>	<b>Accumulated Deficit</b>	<b>Accumulated Other Comprehensive Income</b>	<b>Total</b>
	<b>Shares</b>	<b>Amount</b>	<b>Shares</b>	<b>Amount</b>				
Balances as of January 1, 2008	—	\$ —	23,217,846	\$ 23,218	\$ 16,527,929	\$ (11,952,907)	\$ —	\$ 4,598,240
Issuance of Units for cash in May, net of offering costs of \$88,743	—	—	1,585,550	1,586	3,477,158	—	—	3,478,744
Issuance of Common Stock in May for cash	—	—	27,536	27	4,052	—	—	4,079
Stock-based compensation	—	—	—	—	388,650	—	—	388,650
Net loss	—	—	—	—	—	(8,041,437)	—	(8,041,437)
Accretion on Redeemable Convertible Preference Shares in Subsidiary	—	—	—	—	—	(37,916)	—	(37,916)
Translation adjustment	—	—	—	—	—	—	13,566	13,566
Balances as of December 31, 2008	—	\$ —	24,830,932	\$ 24,831	\$ 20,397,789	\$ (20,032,260)	\$ 13,566	\$ 403,926
Total comprehensive income (loss)						\$ (8,041,437)	\$ 13,566	\$ (8,027,871)

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

**WAFERGEN BIO-SYSTEMS, INC.**  
(A Development Stage Company)

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

	<b>Preferred Stock</b>		<b>Common Stock</b>		<b>Additional</b>	<b>Accumulated</b>	<b>Accumulated</b>	
	<b>Shares</b>	<b>Amount</b>	<b>Shares</b>	<b>Amount</b>	<b>Paid-in</b>	<b>Deficit</b>	<b>Other</b>	<b>Total</b>
Balances as of January 1, 2009	—	\$ —	24,830,932	\$ 24,831	\$ 20,397,789	\$ (20,032,260)	\$ 13,566	\$ 403,926
Cumulative effect of reclassification of warrants	—	—	—	—	(468,071)	368,627	—	(99,444)
Balances as of January 1, 2009, as adjusted	—	—	24,830,932	24,831	19,929,718	(19,663,633)	13,566	304,482
Issuance of Common Stock in June for cash upon exercise of warrants	—	—	71,041	71	100,097	—	—	100,168
Issuance of Units for cash in June and August, net of offering costs of \$781,122	—	—	5,009,000	5,009	4,489,117	—	—	4,494,126
Common Stock canceled in June	—	—	(266)	—	—	—	—	—
Issuance of Common Stock in August, net of 4 shares forfeited in cashless exercise	—	—	10,794	11	(9)	—	—	2
Restricted Stock issued in July, August, September, October, November and December	—	—	130,000	130	(130)	—	—	—
Issuance of Units for cash in December, net of offering costs of \$534,028	—	—	3,308,335	3,308	3,582,802	—	—	3,586,110
Issuance of warrants in December for services	—	—	—	—	37,085	—	—	37,085
Issuance of Common Stock in December for cash	—	—	28,021	28	39,946	—	—	39,974
Stock-based compensation	—	—	—	—	838,952	—	—	838,952
Net loss	—	—	—	—	—	(10,620,488)	—	(10,620,488)
Accretion on Redeemable Convertible Preference Shares in Subsidiary	—	—	—	—	—	(178,162)	—	(178,162)
Translation adjustment	—	—	—	—	—	—	49,815	49,815
Balances as of December 31, 2009	—	\$ —	33,387,857	\$ 33,388	\$ 29,017,578	\$ (30,462,283)	\$ 63,381	\$ (1,347,936)
Total comprehensive income (loss)						\$ (10,620,488)	\$ 49,815	\$ (10,570,673)

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

**WAFERGEN BIO-SYSTEMS, INC.**  
(A Development Stage Company)

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

	Preferred Stock		Common Stock		Additional	Accumulated	Accumulated	
	Shares	Amount	Shares	Amount	Paid-in	Deficit	Other	
	Shares	Amount	Shares	Amount	Capital		Comprehensive	Total
Balances as of January 1, 2010	—	\$ —	33,387,857	\$ 33,388	\$ 29,017,578	\$ (30,462,283)	\$ 63,381	\$ (1,347,936)
Issuance of Units for cash in January, net of offering costs of \$77,299	—	—	82,000	82	29,904	—	—	29,986
Restricted Stock issued for services in January, February and March	—	—	85,000	85	(85)	—	—	—
Issuance of Common Stock in March for cash upon exercise of options	—	—	14,542	15	15,768	—	—	15,783
Issuance of Common Stock in April for cash upon exercise of warrants	—	—	250,000	250	562,250	—	—	562,500
Restricted Stock issued to employees in April	—	—	6,250	6	(6)	—	—	—
Issuance of Common Stock in April for cash upon exercise of options, net of 12 shares forfeited in cashless exercise	—	—	13,486	13	(11)	—	—	2
Restricted Stock issued for services in April, May and June	—	—	85,000	85	(85)	—	—	—
Issuance of Common Stock in June for cash upon exercise of options, net of 2,803 shares forfeited in cashless exercise	—	—	44,711	45	18,146	—	—	18,191
Issuance of Units for cash in July, net of offering costs of \$429,668	—	—	6,001,667	6,002	6,766,330	—	—	6,772,332
Issuance of warrants in July to a placement agent	—	—	—	—	51,140	—	—	51,140
Restricted Stock issued for services in July, August and September	—	—	62,000	62	(62)	—	—	—
Restricted Stock issued to employee in August for services provided as a contractor, net of 34,456 shares forfeited to cover income tax liability	—	—	40,544	40	(44,833)	—	—	(44,793)
Issuance of Common Stock in August and September on conversion of Redeemable Convertible Preference Shares in subsidiary, net of issuance costs of \$8,636	—	—	787,062	787	1,113,246	—	—	1,114,033
Restricted Stock issued to directors in September	—	—	60,000	60	(60)	—	—	—
Issuance of Common Stock in September for cash upon exercise of options, net of 2,816 shares forfeited in cashless exercise	—	—	6,184	6	(6)	—	—	—

(table continues next page)

**WAFERGEN BIO-SYSTEMS, INC.**  
(A Development Stage Company)

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

	<b>Preferred Stock</b>		<b>Common Stock</b>		<b>Additional</b>	<b>Accumulated</b>	<b>Accumulated</b>	
	<b>Shares</b>	<b>Amount</b>	<b>Shares</b>	<b>Amount</b>	<b>Paid-in</b>	<b>Deficit</b>	<b>Other</b>	<b>Total</b>
Restricted Stock issued to employee in October	—	—	50,000	50	(50)	—	—	—
Restricted Stock forfeited in October on termination of employee	—	—	(1,250)	(1)	1	—	—	—
Restricted Stock issued for services in October, November and December	—	—	98,283	98	(98)	—	—	—
Restricted Stock issued to employee in November	—	—	50,000	50	(50)	—	—	—
Issuance of Common Stock in November for cash upon exercise of options, net of 40,268 shares forfeited in cashless exercise	—	—	52,128	52	9,094	—	—	9,146
Issuance of warrants in December as a cost of obtaining a term loan	—	—	—	—	46,230	—	—	46,230
Stock-based compensation	—	—	—	—	1,296,734	—	—	1,296,734
Net loss	—	—	—	—	—	(12,087,381)	—	(12,087,381)
Accretion on Redeemable Convertible Preference Shares in subsidiary associated with premium	—	—	—	—	—	(286,948)	—	(286,948)
Accretion on Redeemable Convertible Preference Shares in subsidiary associated with beneficial conversion feature	—	—	—	—	—	(428,787)	—	(428,787)
Translation adjustment	—	—	—	—	—	—	224,496	224,496
Balances as of December 31, 2010	—	\$ —	41,175,464	\$ 41,175	\$ 38,881,075	\$ (43,265,399)	\$ 287,877	\$ (4,055,272)
Total comprehensive income (loss)						\$ (12,087,381)	\$ 224,496	\$ (11,862,885)

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

**WAFERGEN BIO-SYSTEMS, INC.**  
(A Development Stage Company)

**Consolidated Statements of Cash Flows**

	Year Ended December 31,		Period From October 22, 2002 (Inception) to December 31, 2010
	2010	2009	2010
Cash flows from operating activities:			
Net loss	\$ (12,087,381)	\$ (10,620,488)	\$ (42,546,215)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	432,067	493,112	1,345,727
Non cash miscellaneous income	—	—	(5)
Stock-based compensation	1,296,734	838,952	3,825,217
Issuance of warrants for services	—	37,085	37,085
Unrealized (gain) loss on fair value of warrants, net	(555,144)	564,122	8,978
Exchange loss on issuance of Redeemable Convertible Preference Shares in Subsidiary	3,005	18,029	21,034
Unrealized gain on fair value of put option, net	(88,567)	—	(88,567)
Provision for excess and obsolete inventory	(11,524)	130,478	118,954
Equipment expensed as research & development costs	—	123,998	123,998
Issuance of Series A Preferred Stock for legal services	—	—	50,000
Issuance of Series A Preferred Stock for interest owed	—	—	107,494
Amortization of debt discount	—	—	171,053
Change in operating assets and liabilities:			
Restricted cash	(100,651)	—	(100,651)
Accounts receivable	(519,914)	(218,098)	(778,769)
Inventories	(1,015,256)	56,824	(1,185,704)
Prepaid expenses and other current assets	(36,559)	(3,012)	(175,264)
Other assets	(72,868)	(42,209)	(130,872)
Accounts payable	(45,149)	337,363	1,197,659
Accrued rent	87,076	(21,135)	98,010
Accrued payroll	27,100	81,344	268,686
Accrued severance pay	(353,336)	371,596	18,260
Accrued vacation	34,133	(63,911)	151,711
Deferred revenue	25,000	—	25,000
Warranty reserve	36,850	—	36,850
Accrued other expenses	135,137	83,618	291,714
Net cash used in operating activities	(12,809,247)	(7,832,332)	(37,108,617)
Cash flows from investing activities:			
Purchase of property and equipment	(1,120,808)	(263,291)	(2,360,124)
Net cash used in investing activities	(1,120,808)	(263,291)	(2,360,124)
Cash flows from financing activities:			
Advances from (repayments to) related party, net	—	—	61,588
Repayment of capital lease obligations	(21,663)	(50,347)	(236,574)
Proceeds from issuance of term loan, net of issuance costs	1,842,760	—	1,842,760
Proceeds from issuance of notes payable	—	—	3,665,991
Repayments on notes payable	—	—	(510,000)
Net proceeds from issuance of Redeemable Convertible Preference Shares in subsidiary	733,066	1,116,887	3,789,953
Cost of converting Redeemable Convertible Preference Shares in subsidiary into Common Stock	(8,636)	—	(8,636)
Proceeds from issuance of Series A Preferred Stock	—	—	66,037
Proceeds from issuance of Series B Preferred Stock	—	—	1,559,942
Proceeds from issuance of Common Stock, net of offering costs	7,476,995	10,335,005	31,216,991
Payment of taxes for restricted stock forfeited	(44,793)	—	(44,793)
Net cash provided by financing activities	9,977,729	11,401,545	41,403,259
Effect of exchange rates on cash	208,628	50,304	275,423
Net increase (decrease) in cash and cash equivalents	(3,743,698)	3,356,226	2,209,941
Cash and cash equivalents at beginning of the period	5,953,639	2,597,413	—
Cash and cash equivalents at end of the period	\$ 2,209,941	\$ 5,953,639	\$ 2,209,941

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

**WAFERGEN BIO-SYSTEMS, INC.**  
**(A Development Stage Company)**

**Notes to the Consolidated Financial Statements**

**NOTE 1. The Company**

**General**

WaferGen Bio-systems, Inc. and subsidiaries (the “Company”) are engaged in the development, manufacture and sales of systems for gene expression, genotyping and stem cell research for the life sciences, pharmaceutical drug discovery and biomarker discovery and diagnostic products industries. The Company’s products are aimed at professionals who perform genetic analysis and cell biology, primarily at pharmaceutical and biotech companies, academic and private research centers, and diagnostics companies involved in biomarker research. Through the SmartChip products, the Company plans to provide new performance standards with significant savings of time and cost for professionals in the field of gene expression research facilitating biomarker discovery, toxicology, and clinical research.

Wafergen, Inc. was incorporated in the State of Delaware on October 22, 2002.

Scuttlebutt Yachts, Inc. was incorporated in the state of Nevada on August 4, 2005. On June 20, 2006, its name was changed to La Burbuja Café, Inc. On January 1, 2007, its name was changed to WaferGen Bio-systems, Inc.

**Merger**

On May 31, 2007, WaferGen, Inc. was acquired by WaferGen Bio-systems, Inc. In the transactions, Wafergen, Inc. merged with a subsidiary of WaferGen Bio-systems, Inc. and became a wholly owned subsidiary of WaferGen Bio-systems, Inc. (the “Merger”). The officers and board members of WaferGen Bio-systems, Inc. resigned and were replaced by officers of Wafergen, Inc. along with newly elected board members.

Concurrent with the closing of the Merger, WaferGen Bio-systems, Inc. consummated a private offering (the “Offering”) of 7,178,444 units of its securities (the “Units”), at a purchase price of \$1.50 per Unit, consisting of an aggregate of 7,178,447 shares of Common Stock and warrants to purchase an aggregate of an additional 2,153,533 share of Common Stock for a period of five years at an exercise price of \$2.25 per share (the “Investor Warrants”), which Investor Warrants are callable by the Company under certain circumstances.

On June 12, 2007, WaferGen Bio-systems, Inc. sold an additional 830,000 Units consisting of an aggregate of 830,001 shares of Common Stock and warrants to purchase an aggregate of 249,000 shares of Common Stock.

Wafergen, Inc. had issued notes payable to a stockholder, our Chief Executive Officer, in the aggregate amount of \$750,000. Rather than accepting cash consideration for Units acquired by the same individual, the Company agreed to issue at the first closing 160,000 Units at a rate of one Unit for each \$1.50 of debt in consideration of his cancellation of \$240,000 of existing notes payable.

A summary is as follows:

Gross proceeds from initial offering	\$ 10,767,668
Gross proceeds from additional offering	1,245,000
	<u>12,012,668</u>
Gross proceeds	
Offering costs:	
Paid	(1,851,637)
Issuance of warrants to placement agent	(66,319)
	<u>(1,917,956)</u>
Total offering costs	
Gross proceeds less offering costs	10,094,712
Issuance of warrants to placement agent	66,319
Cancellation of debt	(240,000)
	<u>\$ 9,921,031</u>
Net proceeds	

**WAFERGEN BIO-SYSTEMS, INC.**  
**(A Development Stage Company)**

**Notes to the Consolidated Financial Statements**

We filed a registration statement (the "Registration Statement") registering for resale (i) the shares of Common Stock included in the units sold in the offering, (ii) the shares of Common Stock underlying the warrants included in the units sold and (iii) the shares of Common Stock underlying the warrants issued to the Placement Agent in connection with the offering, consistent with the terms and provisions of the Registration Rights Agreement from the offering, which Registration Statement became effective on January 18, 2008.

The exercise price and number of shares of our common stock issuable on exercise of the warrants may be adjusted in certain circumstances, including in the event of a stock dividend, or our recapitalization, reorganization, merger or consolidation. These warrants also provide the holders with weighted-average anti-dilution price protection.

The warrants, at the option of the holder, may be exercised by cash payment of the exercise price or by "cashless exercise." A "cashless exercise" means that in lieu of paying the aggregate purchase price for the share being purchased upon exercise of the warrants in cash, the holder will forfeit a number of shares underlying the warrants with a "fair market value" equal to such aggregate exercise price. WaferGen Bio-systems, Inc. will not receive additional proceeds to the extent that warrants are exercised by cashless exercise.

Contemporaneously with the closing of the Merger, WaferGen Bio-systems, Inc. executed a Split-Off Agreement with certain shareholders whereby all the assets and liabilities of WaferGen Bio-systems, Inc. just prior to the Merger were exchanged for 4,277,778 shares of common stock of WaferGen Bio-systems, Inc. In addition, all of Wafergen, Inc.'s existing Series A Preferred Stock, Series B Preferred Stock, and Common Stock was converted into Common Stock of WaferGen Bio-systems, Inc. pursuant to the terms of the merger agreement based on an exchange ratio of .53991522 for 1.

WaferGen Bio-systems, Inc. also assumed all outstanding Wafergen, Inc.'s stock options and warrants with proportionate adjustments to the number of underlying shares and exercise prices based on an exchange ratio of .53991522 for 1.

A summary of the Common Stock outstanding of WaferGen Bio-systems, Inc. subsequent to the above was as follows:

WaferGen Bio-systems, Inc. shares outstanding prior to the Merger	11,277,782
Shares issued to Wafergen, Inc. shareholders	8,214,523
Shares issued in the Offering	8,008,448
Shares canceled in accordance with the Split-off Agreement	(4,277,778)
	<hr/>
Total shares outstanding	23,222,975

The transactions between WaferGen Bio-systems, Inc. and Wafergen, Inc. have been treated as a reverse merger and recapitalization of Wafergen, Inc. for reporting purposes. Wafergen, Inc. is the acquirer for accounting purposes. WaferGen Bio-systems, Inc. is the issuer. The historical financial statements for periods prior to the acquisition become those of the acquirer, Wafergen, Inc. In a recapitalization, historical stockholders' equity of the acquirer prior to the merger is retroactively restated for the equivalent number of shares received in the merger after giving effect to any difference in par value of the issuer's and acquirer's stock with an offset to additional paid-in capital. Accumulated deficit of the acquirer is carried forward after the acquisition. Operations prior to the merger are those of the accounting acquirer. Earnings per share for the periods prior to the merger are restated to reflect the equivalent number of shares outstanding.

On January 24, 2008, the Company formed a new subsidiary in Kulim Hi-Tech Park, Kedah, Malaysia. The subsidiary, WaferGen Biosystems (M) Sdn. Bhd., will launch various initiatives to support a number of the Company's ongoing development and commercialization goals. The Company owns 100% of the common stock and 23.5% of the preferred stock of this entity. See Note 6 below.



**WAFERGEN BIO-SYSTEMS, INC.**  
**(A Development Stage Company)**

**Notes to the Consolidated Financial Statements**

On June 16, 2009, the Company completed the first closing under a private placement offering (the “First 2009 Offering”) with certain accredited investors, pursuant to which the Company sold an aggregate of 3,305,000 units at a price of \$1.25 per unit, with each unit consisting of one share of the Company’s common stock and a warrant to purchase 30% of one share of the Company’s common stock at an exercise price of \$2.00 per whole share. At initial issuance, the fair value of the 991,500 warrants was determined to be \$592,865. On August 21, 2009, the Company sold an additional 956,000 units in a second closing, including 286,800 warrants with a fair value of \$204,071. On August 31, 2009, the Company sold a further 748,000 units in a third closing, including 224,400 warrants with a fair value of \$189,066. Each unit in the second and third closing was sold at the same price, and with the same entitlements, as those sold in the first closing.

In total, the Company sold an aggregate of 5,009,000 shares of common stock and warrants to purchase 1,502,700 shares of common stock for \$2.00 in the First 2009 Offering, and received aggregate gross proceeds of \$6,261,250. The following reflects the breakdown of the components of gross proceeds from this offering:

Par value of common stock	\$ 5,009
Paid-in capital	5,270,239
Derivative warrant instruments	<u>986,002</u>
<b>Total</b>	<b><u>\$ 6,261,250</u></b>

The Company retained a selling agent in connection with this private placement offering, and pursuant to the terms of a selling agency agreement, the Company paid the selling agent a cash commission of \$309,356, and the Company issued the selling agent warrants to purchase 128,205, 66,920 and 52,360 shares of common stock at an exercise price of \$2.00 per whole share on the first, second and third closing, respectively. At initial issuance, the Company determined the total allocated fair value of the warrants to be \$168,392. The warrants issued to the selling agent have substantially the same terms as the warrants issued to the investors in the First 2009 Offering.

On December 23, 2009, the Company completed the first closing under another private placement offering (the “Second 2009 Offering”) with certain accredited investors, pursuant to which the Company sold an aggregate of 2,878,333 units at a price of \$1.50 per unit, with each unit consisting of one share of the Company’s common stock and a warrant to purchase 25% of one share of the Company’s common stock at an exercise price of \$2.50 per whole share. At initial issuance, the fair value of the 719,583 warrants was determined to be \$759,900. On December 30, 2009, the Company sold an additional 430,002 units in a second closing, including 107,502 warrants with a fair value of \$82,408. On January 6, 2010, the Company sold a further 82,000 units in a third closing, including 20,500 warrants with a fair value of \$15,715. Each unit in the second and third closing was sold at the same price, and with the same entitlements, as those sold in the first closing.

In total, the Company sold an aggregate of 3,390,335 shares of common stock and warrants to purchase 847,585 shares of common stock for \$2.50 in the Second 2009 Offering, and received aggregate gross proceeds of \$5,085,500. Of these totals, the Company sold 82,000 shares of common stock and 20,500 warrants for proceeds of \$123,000 in the year ended December 31, 2010. The following reflects the breakdown of the components of gross proceeds from this offering:

Par value of common stock	\$ 3,390
Paid-in capital	4,224,087
Derivative warrant instruments	<u>858,023</u>
<b>Total</b>	<b><u>\$ 5,085,500</u></b>

The Company retained a selling agent in connection with this private placement offering, and pursuant to the terms of a selling agency agreement, the Company paid the selling agent a cash commission of \$381,420 (of which \$9,225 related to the closing in the year ended December 31, 2010), and the Company issued the selling agent warrants to purchase 100,742, 15,050 and 2,870 shares of common stock at an exercise price of \$2.50 per whole share on the first, second and third closing, respectively. At initial issuance, the Company determined the total allocated fair value of the warrants to be \$120,123 (of which \$2,200 relates to warrants issued in the year ended December 31, 2010). The warrants issued to the selling agent have the same terms as the warrants issued to the investors in the Second 2009 Offering.

**WAFERGEN BIO-SYSTEMS, INC.**  
**(A Development Stage Company)**

**Notes to the Consolidated Financial Statements**

The warrants issued in the 2009 Offerings have a term of five years and are subject to weighted average anti-dilution protection in the event the Company subsequently issues shares of its common stock, or securities convertible into shares of common stock, for a price per share less than the exercise price of the warrants. The warrants are immediately exercisable and under certain circumstances will be exercisable using cashless exercise. In connection with the closing of each private placement, the Company entered into registration rights agreements with the investors purchasing units in the offerings. Both purchase agreements for the units contains certain negative covenants that restrict: (i) for 180 days after the closing the ability of the Company and its subsidiaries to issue shares of common stock or equivalents (subject to certain exempt issuances), and (ii) for 24 months after closing, the ability of the Company to enter into variable rate transactions. The investors are also entitled to “piggyback” registration rights.

On July 7, 2010, the Company completed a registered direct public offering (the “July 2010 Offering”) with certain accredited investors, pursuant to which the Company sold an aggregate of 6,001,667 units at a price of \$1.20 per unit, with each unit consisting of one share of the Company’s common stock and a warrant to purchase 50% of one share of the Company’s common stock at an exercise price of \$1.55 per whole share. The shares of common stock, warrants to purchase common stock (excluding warrants issued to the selling agents or their designees) and shares of common stock issuable upon exercise of the investor warrants were issued pursuant to a prospectus supplement filed with the Securities and Exchange Commission in connection with a takedown from the Company’s shelf registration statement on Form S-3, which became effective on June 8, 2010.

Subject to certain ownership limitations, the warrants issued in the July 2010 Offering were exercisable immediately and will expire five years from the date the warrants of issuance. The number of shares issuable upon exercise of the warrants and the exercise price of the warrants are adjustable in the event of stock splits, combinations and reclassifications, but contain no anti-dilution provisions that would prevent them from being considered indexed to the Company’s own stock, so they are all accounted for within Stockholders’ Equity, with no derivative liability to be accounted for.

The Company retained a selling agent in connection with this registered direct offering, and pursuant to the terms of a selling agency agreement, the Company paid the selling agents an aggregate fee equal to 6.0% of the gross proceeds received in the offering, subject to certain exceptions. In addition, the Company granted to the selling agents or their designees warrants to purchase an aggregate of 203,500 shares of the Company’s common stock at an exercise price of \$1.50 per whole share. Utilizing the Black-Scholes valuation model and assumptions of the fair value of Common Stock of \$1.03, estimated volatility of 44.46%, a risk-free interest rate of 1.40%, a zero dividend rate and an expected term of four years, the Company determined the total allocated fair value of the warrants to be \$51,140. Other than the exercise price, the warrants issued to the selling agents have substantially the same terms as the warrants issued to the investors in the July 2010 Offering.

**Management’s Plan.** The Company has incurred operating losses and negative cash flows from operations since its inception. Management expects that revenues will increase as a result of current and future product releases. However, the Company also expects to incur additional expenses for the development and expansion of its products, marketing campaigns, and operating costs as it expands its operations. Therefore, the Company expects operating losses and negative cash flows to continue for the foreseeable future and anticipates that losses will increase from current levels as the Company continues to grow and develop. It is management’s plan to obtain additional working capital through additional financings. The Company believes that it will be successful in expanding operations, gaining market share, and raising additional funds. However, there can be no assurance that in the event the Company requires additional financing, such financing will be available at terms which are favorable, or at all. Failure to generate sufficient cash flows from operations or raise additional capital could have a material adverse effect on the Company’s ability to achieve its intended business objectives. These factors raise substantial doubt about the Company’s ability to continue as a going concern.

**Going Concern.** The Company’s consolidated financial statements have been presented on a basis that contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. The Company continues to face significant risks associated with the successful execution of its strategy given the current market environment for similar companies and failure to generate sufficient revenues or raise additional capital could have a material adverse effect on the Company’s ability to continue as a going concern and to achieve its intended business objectives. These facts raise substantial doubt about the Company’s ability to continue as a going concern, and there can be no assurance that the Company will be successful in its efforts to enhance its liquidity situation. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

**WAFERGEN BIO-SYSTEMS, INC.**  
**(A Development Stage Company)**

**Notes to the Consolidated Financial Statements**

**NOTE 2. Summary of Significant Accounting Policies**

**Basis of Presentation.** The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America.

**Principles of Consolidation.** The consolidated financial statements include the financial statements of WaferGen Bio-systems, Inc. and its subsidiaries. All significant transactions and balances between the WaferGen Bio-systems, Inc. and its subsidiaries have been eliminated in consolidation.

**Use of Estimates.** Preparing financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, and expenses. Actual results and outcomes could differ from these estimates and assumptions.

**Cash and Cash Equivalents.** We consider all highly liquid debt investments with a remaining maturity of three months or less when purchased to be cash and cash equivalents.

**Restricted Cash.** Cash and cash equivalents that are restricted as to withdrawal or usage under the terms of contractual agreements are recorded as restricted cash. At December 31, 2010, we maintained a certificate of deposit which serves as collateral for corporate credit cards.

**Foreign Currencies.** Assets and liabilities of non-U.S. subsidiaries that operate in a local currency environment, where that local currency is the functional currency, are translated into U.S. dollars at the exchange rate on the balance sheet date. Revenues and expenses are translated at the average rates of exchange prevailing during each reporting period. Remeasurement adjustments resulting from this process are charged or credited to other comprehensive income (loss).

**Fair Value of Financial Instruments.** The carrying amounts of accounts receivable, prepaid expenses and other current assets, other assets, accounts payable, accrued rent, accrued payroll, accrued severance pay, accrued vacation, deferred revenue, warranty reserve and other accrued expenses approximate fair value due to the short-term maturities of these instruments.

**Concentration of Credit Risk.** Financial instruments that potentially subject the Company to significant concentrations of credit risk consist principally of cash and accounts receivable. The Company places its cash in commercial banks. Accounts in the United States are secured by the Federal Deposit Insurance Corporation. Accounts in Malaysia are also guaranteed by the Malaysian government. The Company's total deposits at commercial banks usually exceed the balances insured.

The Company generally requires no collateral from its customers. At December 31, 2010, four customers accounted for 39%, 26%, 19% and 10% of accounts receivable. At December 31, 2009, four different customers accounted for 30%, 29%, 28% and 12% of accounts receivable. For the year ended December 31, 2010, three customers accounted for 40%, 15% and 12% of total revenues. For the year ended December 31, 2009, one of these customers accounted for 18% of our revenue, and three different customers accounted for 20%, 20% and 19% of total revenues.

**Accounts Receivable.** An allowance for doubtful accounts will be recorded based on a combination of historical experience, aging analysis, and information on specific accounts. Account balances will be written off against the allowance after all means of collection have been exhausted and the potential for recovery is considered remote. The Company has not recorded an allowance against its receivables based on management's estimate that the balance at December 31, 2010 and 2009 is fully collectible.

**Inventory.** Inventory is recorded at the lower of cost (first-in, first-out) or market value. Additionally, the Company evaluates its inventory in terms of excess and obsolete exposures.

**Prepaid Expenses.** Prepaid expenses are advance payment for products or services that will be used in operations and expensed based on usage, events, or the passing of time.

**WAFERGEN BIO-SYSTEMS, INC.**  
**(A Development Stage Company)**

**Notes to the Consolidated Financial Statements**

**Property and Equipment.** Property and equipment are stated at cost and depreciated using the straight-line method over the estimated useful lives of the assets as follows:

Equipment	3 to 5 years
Tools and molds	3 years
Leasehold improvements	3 to 5 years, or remaining lease term if shorter
Furniture and fixtures	5 years

Costs of maintenance and repairs that do not improve or extend the lives of the respective assets are expensed as incurred. Upon retirement or sale, the cost and related accumulated depreciation are removed from the balance sheet and the resulting gain or loss is reflected in operating expenses.

**Deferred Financing Costs.** Costs incurred in connection with the issuance of debt are capitalized and amortized as interest expense using the effective interest method. The unamortized amounts are included in other assets.

**Impairment of Long-Lived Assets.** The Company continually evaluates whether events and circumstances have occurred that indicate the remaining estimated useful life of long-lived assets may warrant revision or that the remaining balance of long-lived assets may not be recoverable. When factors indicate that long-lived assets should be evaluated for possible impairment, the Company uses an estimate of the related undiscounted future cash flows over the remaining life of the long-lived assets in measuring whether they are recoverable. If the estimated undiscounted future cash flows exceed the carrying value of the asset, a loss is recorded as the excess of the assets carrying value over its fair value. No assets were determined to be impaired in 2010 and 2009.

**Income Taxes.** Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the tax consequences attributable to differences between financial statement carrying amounts of existing assets and liabilities and their respective tax bases, and operating loss carry-forwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in the tax rates is recognized in income in the period that includes the enactment date. Accounting for deferred tax represents the best estimate of the likely future tax consequences of events that have been recognized in the Company's consolidated financial statements and tax returns and their future probability. A valuation allowance is recorded for loss carry-forwards and other deferred tax assets where it is more likely than not that such loss carry-forwards and deferred tax assets will not be realized. Interest and penalties related to uncertain tax positions are recognized in the provision for income taxes.

**Government Grants.** Incentives received from governments in the form of grants are recorded as a reduction in expense in accordance with their purpose.

**Revenue Recognition.** The Company recognizes revenue when (i) delivery of product has occurred or services have been rendered, (ii) there is persuasive evidence of a sale arrangement, (iii) selling prices are fixed or determinable, and (iv) collectability from the customers (individual customers and distributors) is reasonable assured. Revenue consists primarily of revenue generated from the sale of the Company's products. Revenue is recorded when the risk and rewards of ownership are transferred to our customers (individual customers and distributors). This generally occurs when the Company's products are shipped from our facility as title has passed. Revenue is recorded net of estimated cash discount. The Company estimates and accrues an allowance for sale returns at the time the product is sold. To date, sales returns have not been material. Distributors have a fourteen day inspection period however this period is not an acceptance provision that purports to be a trial or evaluation purpose, is not an acceptance provision that grants a right of return or exchange on the basis of subjective matters, and is not an acceptance provision based on customer-specific objective criteria. The fourteen day inspection period is an acceptance provision that is based on seller-specified objective criteria.

Revenue from multi-deliverable arrangements is recognized for each element on delivery of product or completion of service. A typical multi-deliverable arrangement would be the shipment of capital equipment to a customer, followed by the delivery of services or of expendable equipment, provided such delivery is both probable and substantially within the Company's control. Revenue for each deliverable is allocated based on full list selling prices, although if none of the deliverables is disproportionately discounted relative to the overall discount, this allocation is approximated by using the actual selling price of each deliverable to the customer. The actual cost of revenue for each deliverable is recognized when the revenue for that deliverable is recognized.

**WAFERGEN BIO-SYSTEMS, INC.**  
(A Development Stage Company)

**Notes to the Consolidated Financial Statements**

**Expense Recognition.** Expenses are charged to expense as incurred.

**Stock-Based Compensation.** The Company measures the fair value of all stock-based awards to employees, including stock options, on the grant date and records the fair value of these awards, net of estimated forfeitures, to compensation expense over the service period. The fair value of awards to consultants is measured on the dates on which performance of services is completed, with interim valuations recorded at balance sheet dates while performance is in progress. The fair value of options is estimated using the Black-Scholes valuation model, and of restricted stock is based on the Company's closing share price on the measurement date.

The weighted-average grant date fair value of options awarded in the years ended December 31, 2010 and 2009, respectively, were \$0.70 and \$0.56. These fair values were estimated using the following assumptions:

	<b>Year Ended December 31,</b>	
	<b>2010</b>	<b>2009</b>
Risk-free interest rate	1.05% - 2.51%	1.31% - 2.97%
Expected term	4.75 Years	4.75 Years
Expected volatility	42.40% - 43.01%	40.04% - 42.22%
Dividend yield	0%	0%

**Risk-free Interest Rate.** This is the United States Treasury rate for the day of the grant having a term equal to the expected term of the option. An increase in the risk-free interest rate will increase the fair value and the related compensation expense.

**Expected Term.** This is the period of time over which the award is expected to remain outstanding and is based on management's estimate, taking into consideration the vesting terms, the contractual life, and historical experience. An increase in the expected term will increase the fair value and the related compensation expense.

**Expected Volatility.** This is a measure of the amount by which the stock price has fluctuated or is expected to fluctuate. Since the Company's stock has not been traded for as long as the expected term of the options, the Company uses a weighted-average of the historic volatility of four comparable companies over the retrospective period corresponding to the expected life of the Company's own options on the grant date. Extra weighting is attached to those companies most similar in terms of size and business activity. An increase in the expected volatility will increase the fair value and the related compensation expense.

**Dividend Yield.** The Company has not made any dividend payments nor does it have plans to pay dividends in the foreseeable future. An increase in the dividend yield will decrease the fair value and the related compensation expense.

**Forfeiture Rate.** This is a measure of the amount of awards that are expected to not vest. An increase in the estimated forfeiture rates will decrease the related compensation expense.

**Warrant Derivative Revaluation.** The Company, beginning effective January 1, 2009, recognizes the fair value of warrants with anti-dilution provisions as liabilities. Warrants are valued when initially issued, and the liability is offset against additional paid in capital. Warrants are also revalued at each reporting date, and the change in their respective fair values is recorded as an unrealized gain or loss within other income and expenses in the statement of operations. The cumulative effect of the change in accounting for these instruments was recognized as an adjustment to the opening balance of accumulated deficit at January 1, 2009, and the transfer of the fair value of derivative warrant instruments as of January 1, 2009, from additional paid-in capital to warrant derivative liability. The Company determines the fair values of these securities using a Monte Carlo Simulation approach, with key input variables provided by management.

**WAFERGEN BIO-SYSTEMS, INC.**  
(A Development Stage Company)

**Notes to the Consolidated Financial Statements**

Fair values at measurement dates during the years ended December 31, 2010 and 2009, were estimated using the following assumptions:

	<b>Year Ended December 31,</b>	
	<b>2010</b>	<b>2009</b>
Risk-free interest rate	0.47% - 2.16%	1.16% - 2.20%
Expected remaining term	1.91 - 4.00 Years	2.71 - 4.00 Years
Expected volatility	43.83% - 92.67%	43.26% - 49.78%
Dividend yield	0%	0%
Private Placement discount to stock price	10% - 15%	15%

**Risk-Free Interest Rate.** This is the United States Treasury rate for the measurement date having a term equal to the expected remaining term of the warrant. An increase in the risk-free interest rate will increase the fair value and the associated derivative liability.

**Expected Remaining Term.** This is the period of time over which the warrant is expected to remain outstanding and is based on management's estimate, taking into consideration the remaining contractual life, and historical experience. An increase in the expected remaining term will increase the fair value and the associated derivative liability.

**Expected Volatility.** This is a measure of the amount by which the stock price has fluctuated or is expected to fluctuate. To the extent that Company's stock has not been traded for as long as the expected remaining term of the warrants, the Company uses a weighted-average of the historic volatility of four comparable companies over the retrospective period corresponding to the expected remaining term of the warrants on the measurement date. Extra weighting is attached to those companies most similar in terms of size and business activity. To the extent that Company's stock has been traded for longer expected remaining term of the warrants, this weighted average is used to determine 50% of the volatility, with the Company's own historic volatility used to determine the remaining 50%. An increase in the expected volatility will increase the fair value and the associated derivative liability.

**Dividend Yield.** The Company has not made any dividend payments nor does it have plans to pay dividends in the foreseeable future. An increase in the dividend yield will decrease the fair value and the associated derivative liability.

**Private Placement Discount to Stock Price.** This is the percentage amount by which future stock offerings are expected to be priced at a discount from the trading price of our common stock at the offering closing dates, and is based on management's estimate, taking into consideration future expectations and historical experience. An increase in the expected discount to stock price will increase the fair value and the associated derivative liability.

**Warranty Reserve.** Our standard warranty agreement is one year from shipment of certain products. We accrue for anticipated warranty costs upon shipment of these products. Our warranty reserve is based on management's judgment regarding anticipated rates of warranty claims and associated repair costs, and we update our assessment quarterly.

**Research and Development.** Research and development costs are charged to operations as incurred.

**Other Comprehensive Income.** Other Comprehensive Income arises solely due to the cumulative translation adjustments which ensue from our Accounting Policy for Foreign Currencies.

**Net Loss Per Share.** Basic net income (loss) per share is computed by dividing net income (loss) by the weighted average number of common shares outstanding during the period. Diluted income (loss) per share is calculated by dividing net income (loss) by the weighted average number of common shares outstanding plus common share equivalents from conversion of dilutive stock options, warrants, and restricted stock using the treasury method, and convertible securities using the as-converted method, except when antidilutive. In the event of a net loss, the effects of all potentially dilutive shares are excluded from the diluted net loss per share calculation as their inclusion would be antidilutive.

**WAFERGEN BIO-SYSTEMS, INC.**  
**(A Development Stage Company)**

**Notes to the Consolidated Financial Statements**

No adjustment has been made to the net loss for charges, gains, losses and accretion related to RCPS, as the effect would be anti-dilutive due to the net loss. The following outstanding stock options, warrants, restricted stock (on an as-converted into common stock basis) and shares issuable or contingently issuable upon conversion of RCPS were excluded from the computation of diluted net loss per share attributable to holders of common stock as they had antidilutive effects for the years ended December 31, 2010 and 2009:

	<b>Year Ended December 31,</b>	
	<b>2010</b>	<b>2009</b>
Shares issuable upon exercise of common stock options	1,035,155	1,409,279
Shares issuable upon exercise of common stock warrants	182,929	96,125
Shares issuable upon vesting of restricted stock	30,784	—
Shares issuable upon conversion of RCPS	3,150,123	1,095,909
Total common share equivalents excluded from denominator for diluted EPS computation	<u>4,398,991</u>	<u>2,601,313</u>

**Segments.** Segments are defined as components of the Company's business for which separate financial information is available that is evaluated by the Company's chief operating decision maker (its CEO) in deciding how to allocate resources and assess performance. The Company presently has only one overall operating segment. See Note 12 below.

**Recent Accounting Pronouncements.**

In January 2010, the FASB issued ASU 2010-06, "Fair Value Measurements and Disclosures (Topic 820): Improving Disclosures about Fair Value Measurements". This guidance requires additional disclosures about fair value measurements, including information about purchases, sales, issuances and settlements in Level 3 (as described in Note 10). This guidance is effective for financial statements issued for fiscal years beginning after December 15, 2010, and will become effective for us on January 1, 2011. The Company expects the adoption of this guidance will not have a material impact on its consolidated financial condition or results of operations, but will require the Company to make additional disclosures.

The Company adopted ASU 2009-17, "Consolidations (Topic 810): Improvements to Financial Reporting by Enterprises Involved with Variable Interest Entities" on January 1, 2010, the first day of the Company's 2010 fiscal year. This guidance 1) replaces the quantitative-based risks and rewards calculation for determining whether an enterprise is the primary beneficiary in a variable interest entity ("VIE") with an approach that is primarily qualitative, 2) requires ongoing assessments of whether an enterprise is the primary beneficiary of a VIE, and 3) requires additional disclosures about an enterprise's involvement in VIEs. The adoption of this guidance did not have a material impact on the Company's consolidated financial condition or results of operations, as the Company has not engaged in transactions with VIEs.

The Company adopted ASU 2009-13, "Revenue Recognition (Topic 605): Multiple-Deliverable Revenue Arrangements" on October 1, 2010, with effect retrospective to January 1, 2010, the first day of the Company's 2010 fiscal year. This guidance primarily provides two significant changes: 1) eliminates the need for objective and reliable evidence of the fair value of the undelivered element in order for a delivered item to be treated as a separate unit of accounting, and 2) eliminates the residual method to allocate the arrangement consideration. In addition, the guidance also expands the disclosure requirements for revenue recognition. The adoption of this guidance did not have a material impact on the Company's consolidated financial condition or results of operations, and had no impact on prior periods, as we had no multi-deliverable arrangements prior to December 2010, however it did require the Company to make additional disclosures.

**WAFERGEN BIO-SYSTEMS, INC.**  
(A Development Stage Company)

**Notes to the Consolidated Financial Statements**

**NOTE 3. Inventories**

Inventories consisted of the following at December 31, 2010 and 2009:

	<b>December 31, 2010</b>	<b>December 31, 2009</b>
Finished goods	\$ 1,143,204	\$ 170,448
Less allowance for excess and obsolete inventory	(118,954)	(130,478)
Inventories, net	<u>\$ 1,024,250</u>	<u>\$ 39,970</u>

**NOTE 4. Property and Equipment**

Property and equipment consisted of the following at December 31, 2010 and 2009:

	<b>December 31, 2010</b>	<b>December 31, 2009</b>
Equipment	\$ 2,153,242	\$ 1,154,406
Tools and molds	73,067	72,437
Leasehold improvements	104,552	63,470
Furniture and fixtures	150,773	42,570
Total property and equipment	2,481,634	1,332,883
Less accumulated depreciation and amortization	(1,289,794)	(890,887)
Property and equipment, net	<u>\$ 1,191,840</u>	<u>\$ 441,996</u>

Depreciation and amortization expense totaled \$432,067 and \$493,112 for the years ended December 31, 2010 and 2009, respectively, and \$1,345,727 for the period from inception to December 31, 2010.

Equipment includes the following amounts under capital leases at December 31, 2010 and 2009:

	<b>December 31, 2010</b>	<b>December 31, 2009</b>
Cost	\$ 47,162	\$ 178,712
Accumulated depreciation	(47,162)	(168,886)
Total	<u>\$ —</u>	<u>\$ 9,826</u>

**NOTE 5. Long Term Obligations**

On December 7, 2010, the Company entered a \$2,000,000 Loan and Security Agreement (“LSA”) with Oxford Finance Corporation (“Oxford”). Borrowings under this term loan are at an interest rate of approximately 13%, and for the first six months, interest only is repayable, after which the balance of principal and interest are repayable in equal monthly installments over a thirty month period. The Company granted Oxford a first priority security interest in all of its assets.

The Company issued a total of 95,368 warrants to Oxford in connection with the LSA. These warrants have a term of five years, and an exercise price of \$1.468. Utilizing the Black-Scholes valuation model and assumptions of the fair value of common stock of \$1.41, an expected term of four years, estimated volatility of 43.96%, a zero dividend rate and a risk-free interest rate of 1.305%, the Company determined the total allocated fair value of the warrants to be \$46,230.



**WAFERGEN BIO-SYSTEMS, INC.**  
(A Development Stage Company)

**Notes to the Consolidated Financial Statements**

Further, the Company incurred initial costs of \$157,240 to obtain the LSA, and a fee of \$95,000 will be payable to Oxford on termination.

Deferred financing costs consisted of the following at December 31, 2010 and 2009:

	<b>December 31, 2010</b>	<b>December 31, 2009</b>
Debt issuance costs	\$ 298,470	\$ —
Less accumulated amortization	(10,885)	—
Debt issuance costs, net	<u>\$ 287,585</u>	<u>\$ —</u>

Non-cash interest expense totaled \$10,885 for the year ended December 31, 2010.

The Company leases its office space for use in its operations under non-cancellable operating leases that expire in April 2015 and December 2013. The Company leases equipment under a capital lease that expires in August 2011.

Aggregate future minimum obligations for leases and the term loan in effect as of December 31, 2010 are as follows:

	<b>Operating Leases</b>	<b>Capital Leases</b>	<b>Term Loan</b>
Year ending December 31,			
2011	\$ 435,513	\$ 9,117	\$ 657,636
2012	477,722	—	941,470
2013	500,745	—	863,014
2014	487,324	—	—
2015	168,837	—	—
Total minimum obligations	<u>\$ 2,070,141</u>	9,117	2,462,120
Less amounts representing interest		(265)	(462,120)
Present value of future minimum payments		8,852	2,000,000
Less current portion of long term obligations		(8,852)	(410,532)
Long term obligations, less current portion		<u>\$ —</u>	<u>\$ 1,589,468</u>

Rent expense totaled \$504,777 and \$210,009 for the years ended December 31, 2010 and 2009, respectively, and \$1,199,044 for the period from inception to December 31, 2010.

Interest expense related to capital leases totaled \$1,272 and \$5,495 for the years ended December 31, 2010 and 2009, respectively, and \$24,631 for the period from inception to December 31, 2010.

**NOTE 6. Redeemable Convertible Preference Shares in Subsidiary**

On July 18, 2008, the Company's Malaysian subsidiary, WaferGen Biosystems (M) Sdn. Bhd. ("WGBM"), received \$1,000,000, less issuance costs totaling \$30,000, in exchange for the issuance of Series A Redeemable Convertible Preference Shares ("RCPS") of WGBM in a private placement to Malaysian Technology Development Corporation Sdn. Bhd. ("MTDC"), a venture capital and development firm in Malaysia. WGBM sold 444,444 Series A RCPS in this private

**WAFERGEN BIO-SYSTEMS, INC.**  
**(A Development Stage Company)**

**Notes to the Consolidated Financial Statements**

placement at the U.S. dollar equivalent of \$2.25 per share. A second closing occurred on November 27, 2008, and WGBM received \$1,000,000, less issuance costs totaling \$30,000, from the sale of an additional 444,444 shares of Series A RCPS.

On June 8, 2009, WGBM received \$250,000, less an exchange loss of \$18,029 and issuance costs totaling \$19,393, in exchange for the issuance of 111,111 Series B RCPS to Expedient Equity Ventures Sdn. Bhd. ("EEV"), in a private placement at the U.S. dollar equivalent of \$2.25 per share. On March 9, 2010, WGBM received \$250,000, less an exchange loss of \$3,005 and issuance costs totaling \$8,929, in exchange for the issuance of a further 111,111 Series B RCPS to EEV, in a private placement at the U.S. dollar equivalent of \$2.25 per share. On September 23, 2009, WGBM received \$500,000, less issuance costs totaling \$7,500, in exchange for the issuance of 222,222 Series B RCPS to Prima Mahawangsa Sdn. Bhd. ("PMSB"), in a private placement at the U.S. dollar equivalent of \$2.25 per share. On May 13, 2010, WGBM received \$500,000, less issuance costs totaling \$5,000, in exchange for the issuance of a further 222,222 Series B RCPS to PMSB, in a private placement at the U.S. dollar equivalent of \$2.25 per share. These transactions represent the full subscription under a Share Subscription Agreement dated April 3, 2009, ("SSA") to sell 444,444 and 222,222 Series B RCPS to PMSB and EEV, respectively, both venture capital and development firms in Malaysia.

On September 18, 2009, WGBM received \$423,128, less issuance costs totaling \$11,319, in exchange for the issuance of 188,057 Series B RCPS to Kumpulan Modal Perdana Sdn. Bhd. ("KMP"), in a private placement at the U.S. dollar equivalent of \$2.25 per share. This represents the full amount receivable under an SSA dated July 1, 2009, to sell Series B RCPS to KMP, a venture capital and development firm in Malaysia.

Under the terms of a Deed of Adherence dated April 3, 2009, certain rights of the holders of the Series A RCPS were modified; also, the use of funds raised through the issuance of both Series A and Series B RCPS was restricted, requiring at least 60% of the total to be utilized for the Company's operations in Malaysia.

Following these modifications, the rights of the holders of RCPS include, but are not limited to, the right:

- (a) to put to the Company their RCPS (or ordinary shares in WGBM received on conversion of those RCPS under paragraph (c) below) at any time during the year 2011 that the share price of the Company's common stock is below \$2.25, to redeem for cash (or, for Series A, at the Company's option, and for Series B, at the holder's option, shares of Company common stock of equivalent value) the amount originally invested in USD plus a premium of 6% (for Series A) or 8% (for Series B), compounded annually, with yearly rests (each year's accrued interest would be forfeited in the event of redemption prior to the anniversary of the initial investment);
- (b) to cause the Company to exchange their RCPS for common stock of the Company at an exchange rate of US\$2.25 per share of common stock, provided, in the case of Series B RCPS, that commencing on August 1, 2010, if during the 10-day trading period immediately prior to the holder's exercise notice the average closing price of the Company's common stock is less than US\$2.647, then the holder shall exchange RCPS at an exchange rate equal to 85% of such 10-day average closing price. This option expires on May 8, 2013, for MTDC's Series A RCPS, and on April 3, 2014, for PMSB's Series B RCPS;
- (c) to convert their RCPS into ordinary shares of the subsidiary, WGBM, at any time, at a conversion rate of three ordinary shares per \$100 invested in RCPS;
- (d) to cause the subsidiary, WGBM, to redeem the RCPS in whole or in part at any time after December 31, 2011, for the principal paid plus a premium of 20% per annum, not compounding, from funds legally available for distribution (i.e. retained earnings; there is presently an accumulated deficit in WGBM of approximately \$2.5 million);
- (e) of first offer on any transfers or new issuance of subsidiary shares (for Series A only); and
- (f) for each of Series A and Series B RCPS, to appoint one of the seven directors of the subsidiary.

**WAFERGEN BIO-SYSTEMS, INC.**  
(A Development Stage Company)

**Notes to the Consolidated Financial Statements**

On August 1, 2010, an event occurred affording the investors in Series B RCPS the option to convert their holdings into a number of shares in the Company at an exchange rate equal to 85% of the previous 10 days' average closing price. This beneficial conversion feature was recorded as a put option derivative liability and a reduction in RCPS, which was immediately amortized as accretion expense. Utilizing the Black-Scholes valuation model and assumptions of the fair value of Common Stock of \$1.21, an exercise price of \$0.9894, estimated volatility of 64.30%, a risk-free interest rate of 0.14%, a zero dividend rate and an expected term of one day, the Company determined the fair value of the put option derivative liability to be \$428,787.

On August 17, 2010, EEV provided notice of exercise of its option to exchange its holding of 222,222 Series B RCPS for 458,483 shares of the Company's common stock, with shares to be issued on September 16, 2010. Utilizing the Black-Scholes valuation model and assumptions of the fair value of Common Stock of \$1.25, an exercise price of \$1.0906, estimated volatility of 64.02%, a risk-free interest rate of 0.16%, a zero dividend rate and an expected term of one day, the Company determined the fair value of the remaining put option derivative liability relating to EEV's shares to be \$73,105, and for the remaining RCPS to be \$208,077.

On September 29, 2010, KMP provided notice of exercise of its option to exchange its holding of 188,057 Series B RCPS for 328,579 shares of the Company's common stock, with shares to be issued on October 29, 2010. Utilizing the Black-Scholes valuation model and assumptions of the fair value of Common Stock of \$1.51, an exercise price of \$1.2878, estimated volatility of 50.94%, a risk-free interest rate of 0.12%, a zero dividend rate and an expected term of one day, the Company determined the fair value of the remaining put option derivative liability relating to KMP's shares to be \$73,027, and for the remaining RCPS to be \$172,588.

On December 31, 2010, the Company revalued the put option liability utilizing the Black-Scholes valuation model and assumptions of the fair value of Common Stock of \$1.22, an exercise price of \$1.0217, estimated volatility of 55.40%, a risk-free interest rate of 0.07%, a zero dividend rate and an expected term of one day, and determined the fair value of the remaining put option derivative liability to be \$194,088.

WGBM is authorized to issue 200,000,000 RCPS with a par value of RM0.01. There were 1,743,611 RCPS (including 410,279 held by the Company upon exercise by EEV and KMP of their options) issued and outstanding at December 31, 2010, and 1,410,278 RCPS (none of which was held by the Company) issued and outstanding at December 31, 2009.

The balance in RCPS comprises the following at December 31, 2010 and 2009:

	December 31, 2010	December 31, 2009
<b>SERIES A</b>		
Proceeds from issuance of RCPS	\$ 2,000,000	\$ 2,000,000
Issuance costs	(60,000)	(60,000)
Accretion of issuance costs	45,416	25,416
Accretion of redemption premium	283,717	154,450
<b>Total Series A RCPS</b>	<b>2,269,133</b>	<b>2,119,866</b>
<b>SERIES B</b>		
Proceeds from issuance of RCPS	1,000,000	1,155,099
Issuance costs	(23,763)	(38,212)
Exchange loss on issuance	—	18,029
Accretion of issuance costs	15,073	4,538
Accretion of redemption premium	77,033	31,674
<b>Total Series B RCPS</b>	<b>1,068,343</b>	<b>1,171,128</b>
<b>Total RCPS</b>	<b>\$ 3,337,476</b>	<b>\$ 3,290,994</b>

**WAFERGEN BIO-SYSTEMS, INC.**  
**(A Development Stage Company)**

**Notes to the Consolidated Financial Statements**

**NOTE 7. Stock Awards**

In 2003, WaferGen's Board of Directors adopted the 2003 Incentive Stock Plan (the "2003 Plan"). The 2003 Plan authorized the Board of Directors to grant incentive stock options and non-statutory stock options to employees, directors, and consultants for up to 1,500,000 shares of common stock. Under the Plan, incentive stock options and nonqualified stock options could be granted. Incentive stock options were to be granted at a price that is no less than 100% of the fair value of the stock at the date of grant. Options vest over a period according to the Option Agreement, and are exercisable for a maximum period of ten years after date of grant. Options granted to stockholders who own more than 10% of the outstanding stock of WaferGen at the time of grant must be issued at an exercise price no less than 110% of the fair value of the stock on the date of grant. In November 2006, WaferGen increased the aggregate number of shares of Common Stock that may be issued under the 2003 Plan to a total authorized reserve of 2,500,000 shares, a 1,000,000 share increase. The 2003 Plan was frozen when the 2007 Plan was adopted, resulting in no further options available for grant.

In January, 2007, the Company's Board of Directors and stockholders adopted the 2007 Stock Option Plan (the "2007 Plan"). The purpose of the 2007 Plan was to provide an incentive to retain the employment of directors, officer, consultants, advisors and employees of the Company, persons of training, experience and ability, to attract new directors, officers, consultants, advisors and employees whose services are considered valuable, to encourage the sense of proprietorship, and to stimulate the active interest of such persons into the Company's development and financial success. Under the 2007 Plan, the Company was authorized to issue incentive stock options intended to qualify under Section 422 of the Code, non-qualified stock options and restricted stock. The 2007 Plan was frozen when the 2008 Plan was adopted, resulting in no further options available for grant.

On June 5, 2008, the Company's stockholders adopted the 2008 Stock Incentive Plan (the "2008 Plan") following approval of the 2008 Plan by the Board of Directors. The 2008 Plan initially authorized the issuance of up to 2,000,000 shares of common stock pursuant to the terms of the 2008 Plan. On December 4, 2009, the Company's stockholders approved an amendment to the 2008 Plan following approval of the 2008 Plan by the Board of Directors, adding an additional 1,500,000 shares, bringing the total to 3,500,000 shares of our common stock available for issuance under the 2008 Plan. On September 16, 2010, the Company's stockholders approved a further amendment to the 2008 Plan following approval of the 2008 Plan by the Board of Directors, adding an additional 3,000,000 shares, bringing the total to 6,500,000 shares of our common stock available for issuance under the 2008 Plan. Notwithstanding the foregoing, no more than 3,250,000 shares of our common stock may be granted pursuant to awards of restricted stock and restricted stock units. The number of shares of our common stock available under the 2008 Plan will be subject to adjustment in the event of a stock split, stock dividend or other extraordinary dividend, or other similar change in our common stock or our capital structure. The purpose of the 2008 Plan is to provide an incentive to retain the employment of directors, officers, consultants, advisors and employees of the Company, to attract new personnel whose training, experience and ability are considered valuable, to encourage the sense of proprietorship, and to stimulate the active interest of such persons in the Company's development and financial success. Under the 2008 Plan, the Company is authorized to issue incentive stock options intended to qualify under Section 422 of the Code, non-qualified stock options and restricted stock. Awards may vest over varying periods, as specified by the Company's Board of Directors for each grant, and have a maximum term of seven years from the grant date. The 2008 Plan is administered by the Company's Board of Directors.

The Company has issued both options and restricted stock under these Plans. Restricted stock grants afford the recipient the opportunity to receive shares of common stock, subject to certain terms, whereas options give them the right to purchase common stock at a set price. Both the Company's options and restricted stock issued to employees generally have vesting restrictions that are eliminated over a four-year period, although vesting may be over a shorter period, or may occur on the grant date, depending on the terms of each individual award.

**WAFERGEN BIO-SYSTEMS, INC.**  
(A Development Stage Company)

**Notes to the Consolidated Financial Statements**

A summary of stock option and restricted stock transactions is as follows:

	Shares Available for Grant	Stock Options		Restricted Stock	
		Number of Options Outstanding	Weighted Average Exercise Price	Number of Options Outstanding	Weighted Average Grant-Date Fair Value
Balance at January 1, 2009	734,500	3,686,700	\$ 1.4505	22,383	\$ 1.0432
2008 Plan Amendment	1,500,000	—	\$ —	—	\$ —
Granted	(1,257,000)	1,127,000	\$ 1.6207	130,000	\$ 2.0154
Exercised	—	(38,819)	\$ 1.0298	—	\$ —
Vested	—	—	\$ —	(144,175)	\$ 1.9163
Forfeited	310,479	(393,135)	\$ 1.5072	—	\$ —
Canceled	150,000	(232,344)	\$ 2.7135	—	\$ —
Balance at December 31, 2009	1,437,979	4,149,402	\$ 1.4246	8,208	\$ 1.1055
2008 Plan Amendment	3,000,000	—	\$ —	—	\$ —
Granted	(2,569,033)	1,997,500	\$ 1.7249	571,533	\$ 1.6768
Exercised	—	(176,950)	\$ 0.6912	—	\$ —
Vested	—	—	\$ —	(416,535)	\$ 1.6809
Forfeited	228,042	(276,226)	\$ 1.7863	(1,250)	\$ 2.3900
Canceled	94,833	(149,833)	\$ 2.0310	(34,456)	\$ 1.5927
Balance at December 31, 2010	2,191,821	5,543,893	\$ 1.5218	127,500	\$ 1.6422

The weighted average fair value of options granted in the years ended December 31, 2010 and 2009, was \$0.70 and \$0.56, respectively. The fair value of options vested in the years ended December 31, 2010 and 2009, was \$666,656 and \$528,804, respectively.

The following table summarizes information concerning outstanding options as of December 31, 2010:

Range of Exercise Prices	Options Outstanding			Options Exercisable		
	Number Outstanding as of December 31, 2010	Weighted Average Remaining Contractual Life (in Years)	Weighted Average Exercise Price	Number Exercisable as of December 31, 2010	Weighted Average Remaining Contractual Life (in Years)	Weighted Average Exercise Price
\$ 0.0002 - \$0.0185	161,973	3.47	\$ 0.0075	161,973	3.47	\$ 0.0075
\$ 0.1482 - \$0.4630	346,336	2.54	\$ 0.3403	346,112	2.54	\$ 0.3402
\$ 0.6000 - \$1.0000	249,500	4.18	\$ 0.9359	186,022	3.96	\$ 0.9140
\$ 1.1000 - \$1.6500	2,763,000	5.29	\$ 1.4362	1,319,123	4.32	\$ 1.4381
\$ 1.7600 - \$2.3900	2,023,084	5.76	\$ 2.0344	1,008,481	4.74	\$ 2.1190
	5,543,893	5.19	\$ 1.5218	3,021,711	4.19	\$ 1.4307

The aggregate intrinsic value of options outstanding and exercisable at December 31, 2010 was \$603,743 and \$571,721, respectively. Aggregate intrinsic value is the total pretax amount (i.e., the difference between the Company's stock price and the exercise price) that would have been received by the option holders had all their in-the-money options been exercised.

The Company received \$122,308 for the 176,950 options exercised during the year ended December 31, 2010, which had an intrinsic value of \$189,881. The Company received \$39,976 for the 38,819 options exercised during the year ended December 31, 2009, which had an intrinsic value of \$39,855.

**WAFERGEN BIO-SYSTEMS, INC.**  
**(A Development Stage Company)**

**Notes to the Consolidated Financial Statements**

The amounts expensed for stock-based compensation totaled \$1,296,734 and \$838,952 for the years ended December 31, 2010 and 2009, respectively, and \$3,825,217 for the period from inception to December 31, 2010. The sums expensed include \$688,585 and \$262,000 for restricted stock awards to consultants in the years ended December 31, 2010 and 2009, respectively.

At December 31, 2010, the total stock-based compensation cost not yet recognized, net of estimated forfeitures, was \$1,362,915. This cost is expected to be recognized over an estimated weighted average amortization period of 3.01 years. No amounts related to stock-based compensation costs have been capitalized. The tax benefit and the resulting effect on cash flows from operations and financial activities, related to stock-based compensation costs were not recognized as the Company currently provides a full valuation allowance for all of its deferred taxes.

**NOTE 8. Warrant Derivative Liabilities**

The Company has incurred liabilities for the estimated fair value of derivative warrant instruments. The estimated fair value of the derivative warrant instruments has been calculated using a Monte Carlo Simulation approach, with key input variables provided by management, as of each issuance date, with the valuation offset against additional paid in capital, and at each reporting date, with changes in fair value recorded as unrealized gains or losses in non-operating income (expense).

During the year ended December 31, 2010, a \$555,144 decrease in the fair value of the warrant derivative liability was recorded as an unrealized gain on the fair value of warrants, net. During the year ended December 31, 2009, a \$564,122 increase in the fair value of the warrant derivative liability was recorded as an unrealized loss on the fair value of warrants, net.

The fair value of warrants ranged from \$0.32 to \$0.69 at December 31, 2010, and from \$0.52 to \$0.97 at December 31, 2009. A summary of activity in warrant derivative liabilities is included in Note 10.

A summary of outstanding common stock warrants as of December 31, 2010 is as follows:

<b>Securities Into Which Warrants are Convertible</b>	<b>Warrants Outstanding</b>	<b>Warrants Subject to Anti-Dilution</b>	<b>Exercise Price</b>	<b>Expiration Date</b>
Common Stock	44,401	—	\$1.410	March 2012
Common Stock	95,368	—	\$1.468	December 2015
Common Stock	203,500	—	\$1.500	July 2015
Common Stock	3,000,830	—	\$1.550	July 2015
Common Stock	1,944,651	1,944,651	\$1.800	June and August 2014
Common Stock	1,078,401	1,078,401	\$2.240	December 2014 and January 2015
Common Stock	2,666,459	—	\$2.250	May and June 2012
Common Stock	841,885	841,885	\$2.260	May 2013
Common Stock	200,000	—	\$3.000	December 2014 and November 2015
<b>Total</b>	<b>10,075,495</b>	<b>3,864,937</b>		

The warrants expiring in December 2014 and January 2015 were originally issued in December 2009 and January 2010 with an exercise price of \$2.50 and entitled the holders thereof to purchase an aggregate of 966,247 shares. As a result of anti-dilution adjustments with respect to such warrants pursuant to their terms, such warrants, as of December 31, 2010, had an exercise price of \$2.24 and entitled the holders thereof to purchase an aggregate of 1,078,401 shares.

The warrants expiring in June and August 2014 were originally issued in June and August 2009 with an exercise price of \$2.00 and entitled the holders thereof to purchase an aggregate of 1,750,185 shares. As a result of anti-dilution adjustments with respect to such warrants pursuant to their terms, such warrants, as of December 31, 2010, had an exercise price of \$1.80 and entitled the holders thereof to purchase an aggregate of 1,944,651 shares.

**WAFERGEN BIO-SYSTEMS, INC.**  
**(A Development Stage Company)**

**Notes to the Consolidated Financial Statements**

The warrants expiring in May 2013 were originally issued in May 2008 with an exercise price of \$3.00 and entitled the holders thereof to purchase an aggregate of 634,220 shares. As a result of weighted-average anti-dilution adjustments with respect to such warrants pursuant to their terms, such warrants, as of December 31, 2010, had an exercise price of \$2.26 and entitled the holders thereof to purchase an aggregate of 841,885 shares.

The 95,368 warrants expiring in December 2015 were issued in December 2010 in conjunction with obtaining a term loan (see Note 5).

The exercise price of 50,000 warrants expiring in December 2014 was amended from \$3.25 to \$3.00 in the second quarter of 2010. The change in their fair value was not significant, and no expense was recorded.

**NOTE 9. Cash Flow Information**

Cash paid during the years ended December 31, 2010 and 2009, and the period from inception to December 31, 2010, is as follows (interest paid in the year ended December 31, 2010, excludes payments for initial costs totaling \$157,240 relating to the term loan from Oxford, which are being amortized as interest expense over the term of the loan, as described in Note 5):

	<b>Year Ended December 31,</b>		<b>Period From</b>
			<b>October 22, 2002</b>
			<b>(Inception) to</b>
	<b>2010</b>	<b>2009</b>	<b>December 31,</b>
			<b>2010</b>
Interest	\$ 2,736	\$ 9,204	\$ 45,277
Income taxes	\$ —	\$ —	\$ —

**WAFERGEN BIO-SYSTEMS, INC.**  
(A Development Stage Company)

**Notes to the Consolidated Financial Statements**

Supplemental disclosure of non-cash investing and financing activities for the years ended December 31, 2010 and 2009, and the period from inception to December 31, 2010, is as follows:

	<b>Year Ended December 31,</b>		<b>Period From</b>
	<b>2010</b>	<b>2009</b>	<b>October 22, 2002</b>
			<b>(Inception) to</b>
			<b>December 31, 2010</b>
Accretion on Series B Preferred Stock	\$ —	\$ —	\$ 155,998
Accretion on Redeemable Convertible Preference Shares in subsidiary associated with premium	\$ 286,948	\$ 178,162	\$ 503,026
Recording of put option liability and accretion on Redeemable Convertible Preference Shares in subsidiary associated with beneficial conversion feature	\$ 428,787	\$ —	\$ 428,787
Exchange of Common Stock for Redeemable Convertible Preference Shares in subsidiary	\$ 1,122,669	\$ —	\$ 1,122,669
Conversion of due to a stockholder to notes payable	\$ —	\$ —	\$ 61,588
Issuance of warrants with notes payable	\$ —	\$ —	\$ 171,053
Issuance of warrants with term loan	\$ 46,230	\$ —	\$ 46,230
Conversion of debt to Common Stock	\$ —	\$ —	\$ 240,000
Conversion of debt to Series A Preferred Stock	\$ —	\$ —	\$ 2,977,579
Deposit in equipment in 2007 lapsed in 2008	\$ —	\$ —	\$ 51,446
Property and equipment acquired with capital leases	\$ —	\$ —	\$ 256,326
Inventory transferred to Property and equipment	\$ 42,500	\$ —	\$ 42,500
Issuance to placement agents of warrants classified as derivative liabilities	\$ 2,200	\$ 286,315	\$ 288,515

**NOTE 10. Fair Value of Financial Instruments**

Fair value measurements are determined under a three-level hierarchy for fair value measurements that prioritizes the inputs to valuation techniques used to measure fair value, distinguishing between market participant assumptions developed based on market data obtained from sources independent of the reporting entity ("observable inputs") and the reporting entity's own assumptions about market participant assumptions developed based on the best information available in the circumstances ("unobservable inputs").



**WAFERGEN BIO-SYSTEMS, INC.**  
(A Development Stage Company)

**Notes to the Consolidated Financial Statements**

Fair value is the price that would be received to sell an asset or would be paid to transfer a liability (i.e., the “exit price”) in an orderly transaction between market participants at the measurement date. In determining fair value, we primarily use prices and other relevant information generated by market transactions involving identical or comparable assets (“market approach”). We also consider the impact of a significant decrease in volume and level of activity for an asset or liability when compared with normal activity to identify transactions that are not orderly.

The highest priority is given to unadjusted quoted prices in active markets for identical assets (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). Securities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement.

The three hierarchy levels are defined as follows:

Level 1 – Quoted prices in active markets that are unadjusted and accessible at the measurement date for identical, unrestricted assets or liabilities;

Level 2 – Quoted prices for identical assets and liabilities in markets that are not active, quoted prices for similar assets and liabilities in active markets or financial instruments for which significant inputs are observable, either directly or indirectly;

Level 3 – Prices or valuations that require inputs that are both significant to the fair value measurement and unobservable.

Credit risk adjustments are applied to reflect the Company’s own credit risk when valuing all liabilities measured at fair value. The methodology is consistent with that applied in developing counterparty credit risk adjustments, but incorporates the Company’s own credit risk as observed in the credit default swap market.

The following table presents the Company’s assets and liabilities that are measured at fair value on a recurring basis at December 31, 2010:

	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Total</u>
<b>Financial Assets:</b>				
Cash and cash equivalents, including restricted cash	\$ 2,310,592	\$ —	\$ —	\$ 2,310,592
<b>Financial Liabilities:</b>				
Warrant derivative liabilities	\$ —	\$ —	\$ 2,240,962	\$ 2,240,962
Put option derivative liability	\$ —	\$ —	\$ 194,088	\$ 194,088

The following table sets forth a reconciliation of changes in the year ended December 31, 2010, in the fair value of warrant derivative liabilities classified as level 3 in the fair value hierarchy:

Balance at January 1, 2010	\$ 2,778,191
Additions - fair value of warrants issued in January 2010	17,915
Change in unrealized (gains) losses, net <sup>(1)</sup>	(555,144)
Transfers	—
Balance at December 31, 2010	\$ 2,240,962

(1) Reported in other income and expenses in the Consolidated Statements of Operations.

**WAFERGEN BIO-SYSTEMS, INC.**  
(A Development Stage Company)

**Notes to the Consolidated Financial Statements**

The following table sets forth a reconciliation of changes in the year ended December 31, 2010, in the fair value of put option derivative liabilities classified as level 3 in the fair value hierarchy:

Balance at January 1, 2010	\$	—
Additions - fair value of put option on August 1, 2010		428,787
Change in unrealized (gains) losses, net <sup>(2)</sup>		(88,567)
Settlements		(146,132)
Balance at December 31, 2010	\$	<u>194,088</u>

(2) Reported in other income and expenses in the Consolidated Statements of Operations.

**NOTE 11. Income Taxes**

The provision for income taxes consists of the following for the years ended December 31, 2010 and 2009, and the period from inception to December 31, 2010:

	<b>Year Ended December 31,</b>		<b>Period From</b>
	<b>2010</b>	<b>2009</b>	<b>October 22, 2002</b>
			<b>(Inception) to</b>
			<b>December 31, 2010</b>
Current:			
Federal	\$	—	\$
State		—	—
Foreign		—	—
Total Current	\$	—	\$
Deferred:			
Federal	\$	—	\$
State		—	—
Foreign		—	—
Total Deferred	\$	—	\$
Provision for income taxes	\$	—	\$

A reconciliation of the provision for income taxes with the expected provision for income taxes computed by applying the federal statutory income tax rate 34% to the net loss before provision for income taxes for the years ended December 31, 2010 and 2009, and the period from inception to December 31, 2010, is as follows:

	<b>Year Ended December 31,</b>		<b>Period From</b>
	<b>2010</b>	<b>2009</b>	<b>October 22, 2002</b>
			<b>(Inception) to</b>
			<b>December 31,</b>
			<b>2010</b>
Provision for income taxes at federal statutory rate	\$ (4,109,710)	\$ (3,610,966)	\$ (14,478,605)
Federal research and development tax credits	(243,728)	(155,210)	(838,117)
Expenses not deductible	(78,682)	392,386	911,590
Foreign loss taxed at lower rates	57,721	44,792	167,287
Change in federal valuation allowance	4,374,399	3,328,998	14,237,845
Provision for income taxes	\$	—	\$

**WAFERGEN BIO-SYSTEMS, INC.**  
(A Development Stage Company)

**Notes to the Consolidated Financial Statements**

The components of the deferred tax assets as of December 31, 2010 and 2009, are as follows:

	<b>December 31, 2010</b>	<b>December 31, 2009</b>
Deferred tax assets:		
Net operating loss carry-forwards	\$ 14,953,083	\$ 9,703,709
Capitalized start-up cost and research and development cost	763,901	851,082
Research and development tax credit	1,514,570	973,788
Depreciation on property and equipment	110,209	38,410
Reserves and accruals	146,734	201,797
<b>Total deferred tax asset</b>	<b>17,488,497</b>	<b>11,768,786</b>
Valuation allowance	(17,488,497)	(11,768,786)
<b>Net deferred tax assets</b>	<b>\$ —</b>	<b>\$ —</b>

The following deferred income taxes were provided for the years ended December 31, 2010 and 2009, and the period from inception to December 31, 2010:

	<b>Year Ended December 31,</b>		<b>Period From October 22, 2002 (Inception) to December 31, 2010</b>
	<b>2010</b>	<b>2009</b>	
Deferred tax assets:			
Net operating loss carry-forwards	\$ 5,249,374	\$ 3,090,184	\$ 14,953,083
Capitalized start-up cost and research and development cost	(87,181)	(64,317)	763,901
Research and development tax credit	540,782	273,242	1,514,570
Depreciation on property and equipment	71,799	25,807	110,209
Reserves and accruals	(55,063)	119,848	146,734
Valuation allowance	(5,719,711)	(3,444,764)	(17,488,497)
<b>Net deferred income taxes</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ —</b>

Based on the available objective evidence, management believes it is more likely than not that the net deferred tax assets will not be fully realizable. Accordingly, the Company has provided a full valuation allowance against its net deferred tax assets. There are no prior year tax returns under audit by taxing authorities, and management is not aware of any impending audits.

At December 31, 2010, the Company had federal and state net operating loss carry-forwards ("NOLs") of approximately \$35,300,000 and foreign operating loss carry-forwards of approximately \$2,100,000. The federal, state, and foreign NOLs will expire in various periods through 2030. We may never be able to utilize any of the state NOLs due to the California Budget Act of 2010, Section 870, enacted on October 8, 2010, which suspended the utilization of NOLs for California state tax.

At December 31, 2010, the Company had federal and state research and development tax credits of approximately \$700,000 and \$800,000, respectively. The federal research and development tax credits will expire in various periods through 2030 and the California state research and development tax credit can be carried forward indefinitely.

Utilization of NOLs may be subject to substantial limitation due to the ownership change limitations provided by Section 382 of the Internal Revenue Code of 1986 and similar state provisions. The annual limitation may result in the expiration of NOLs and tax credits before utilization.

Tax years that remain open for examination are 2006, 2007, 2008, 2009 and 2010.

**WAFERGEN BIO-SYSTEMS, INC.**  
**(A Development Stage Company)**

**Notes to the Consolidated Financial Statements**

**NOTE 12. Business Segment Information**

Operating segments are defined as component of the Company's business for which separate financial information is available that is evaluated by the Company's chief operating decision maker (its CEO) in deciding how to allocate resources and assessing performance. The Company presently has only one operating segment.

Revenue by geographic areas for the years ended December 31, 2010 and 2009, are as follows:

	<u>2010</u>	<u>2009</u>
North America	\$ 602,474	\$ 346,185
Asia	1,019,293	1,035
Europe	<u>545,522</u>	<u>32,153</u>
Total revenue	<u>\$ 2,167,289</u>	<u>\$ 379,373</u>

Long-lived assets by geographic areas as of December 31, 2010 and 2009, are as follows:

	<u>2010</u>	<u>2009</u>
United States	\$ 1,040,098	\$ 287,770
Malaysia	<u>151,742</u>	<u>154,226</u>
Total long-lived assets	<u>\$ 1,191,840</u>	<u>\$ 441,996</u>

**NOTE 13. Contingencies**

From time to time the Company may be involved in claims arising in connection with its business. Based on information currently available, the Company believes that the amount, or range, of reasonably possible losses in connection with any pending actions against it, in excess of established reserves, in the aggregate, not to be material to its consolidated financial condition or cash flows. However, losses may be material to the Company's operating results for any particular future period, depending on the level of income for such period.

**WAFERGEN BIO-SYSTEMS, INC.**  
(A Development Stage Company)

**Notes to the Consolidated Financial Statements**

**NOTE 14. Quarterly Financial Data (Unaudited)**

Selected summarized quarterly financial information for fiscal 2010 and 2009 is as follows:

	Year Ended December 31, 2010			
	First	Second	Third	Fourth
Revenue	\$ 389,785	\$ 431,894	\$ 633,241	\$ 712,369
Gross margin	\$ 253,930	\$ 296,000	\$ 321,194	\$ 434,099
Unrealized gain (loss) on fair value of warrants, net	\$ (1,886,692)	\$ 3,567,168	\$ (1,665,950)	\$ 540,618
Net loss	\$ (4,529,265)	\$ 724,496	\$ (5,224,763)	\$ (3,057,849)
Net loss applicable to common stockholders	\$ (4,594,788)	\$ 645,706	\$ (5,732,701)	\$ (3,121,333)
Net loss per share - basic and diluted	\$ (0.14)	\$ 0.02	\$ (0.14)	\$ (0.08)

	Year Ended December 31, 2009			
	First	Second	Third	Fourth
Revenue	\$ 41,838	\$ 68,918	\$ 78,860	\$ 189,757
Gross margin	\$ 26,006	\$ (55,014)	\$ 11,963	\$ 133,377
Unrealized gain (loss) on fair value of warrants, net	\$ 13,743	\$ 34,325	\$ (548,451)	\$ (63,739)
Net loss	\$ (1,764,057)	\$ (2,836,659)	\$ (3,012,482)	\$ (3,007,290)
Net loss applicable to common stockholders	\$ (1,799,057)	\$ (2,873,075)	\$ (3,056,158)	\$ (3,070,360)
Net loss per share - basic and diluted	\$ (0.07)	\$ (0.11)	\$ (0.11)	\$ (0.10)

**NOTE 15. Subsequent Events**

During the first quarter of 2011, the Company's Malaysian subsidiary received \$5,000,000, less issuance costs, in exchange for the issuance of Series C RCPS. WGBM sold 3,233,734 Series C RCPS in the private placement at the U.S. dollar equivalent of \$1.55 per share to MTDC, which was also granted an option to purchase a further 1,077,911 shares at the U.S. dollar equivalent of \$2.32 per share. Shares of Series C RCPS are convertible into shares of the Company's common stock at a ratio of one for one.

**Item 9. Changes In and Disagreements with Accountants on Accounting and Financial Disclosure.**

None.

**Item 9A. Controls and Procedures.**

As of the end of the period covered by this Report, management performed, with the participation of our principal executive officer and principal financial officer, an evaluation of the effectiveness of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Our disclosure controls and procedures are those designed to ensure that information required to be disclosed in the report we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC’s rules and forms, and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosures. Based on the evaluation and the identification of the material weaknesses in internal control over financial reporting described below, our principal executive officer and principal financial officer concluded that, as of December 31, 2010, the Company’s disclosure controls and procedures were not effective.

**Management’s Report on Internal Control Over Financial Reporting**

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Internal control over financial reporting is a process designed by, or under the supervision of, our principal executive officer and principal financial officer, and effected by our Board of Directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with generally accepted accounting principles (GAAP). Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projection of any evaluation of effectiveness to future periods is 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.

Management has conducted, with the participation of our principal executive officer and principal financial officer, an assessment, including testing of the effectiveness, of our internal control over financial reporting as of December 31, 2010. Management’s assessment of internal control over financial reporting was conducted using the criteria in Internal Control over Financial Reporting – Guidance for Smaller Public Companies issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”).

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company’s annual or interim financial statements will not be prevented or detected on a timely basis. In connection with management’s assessment of our internal control over financial reporting as required under Section 404 of the Sarbanes-Oxley Act of 2002, we identified the following material weaknesses in our internal control over financial reporting as of December 31, 2010:

1. We have not adequately divided, or compensated for, incompatible functions among personnel to reduce the risk that a potential material misstatement of the financial statements would occur without being prevented or detected; and
2. We rely on our external auditors to review and adjust the Company’s accounting and related financial disclosures regarding the Redeemable Convertible Preference Shares in our subsidiary.

The first material weakness described above was previously identified in Item 9A(T) in our Amended Report on Form 10K/A for the year ended December 31, 2009, which also identified two other material weaknesses, one with respect to our ability to design or otherwise maintain adequate controls to ensure that we adopt new accounting policies with respect to non-routine matters, and one with respect to have insufficient documentation of our information technology general control environment. Both of these material weaknesses have been remediated.

Because of the material weaknesses noted above, management has concluded that we did not maintain effective internal control over financial reporting as of December 31, 2010, based on Internal Control over Financial Reporting – Guidance for Smaller Public Companies issued by COSO.

## **Remediation of Material Weaknesses in Internal Control Over Financial Reporting**

Management is in the process of addressing its material weaknesses in an effort to improve its system of internal control over financial reporting through the following actions:

1. We have introduced and maintained employee access restrictions within our accounting system, in accordance with the formally adopted Financial Delegation Policy, which is kept up to date. Further, we have formalized procedures for independent review and approval. Nevertheless, as a small company, we do not have the resources to fund sufficient staff to ensure a complete segregation of responsibilities within the accounting function, and we remain reliant on management oversight.
2. We have provided technical training to our accounting personnel relating to the appropriate accounting requirements for Redeemable Convertible Preference Shares in our subsidiary.

We believe that the foregoing initiatives will enable us to improve our internal controls over financial reporting. Management is committed to continuing efforts aimed at improving the design adequacy and operational effectiveness of its system of internal controls. The remediation efforts noted above will be subject to the Company's internal control assessment, testing and evaluation process.

This Report does not include an attestation report of the Company's registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the Company's registered public accounting firm pursuant to temporary rules of the SEC that permit the Company to provide only management's report in this Report.

## **Changes in Internal Control over Financial Reporting**

There have not been any changes in the Company's internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting, except:

1. We have hired a full-time IT employee, and we have now designed and documented procedures addressing our information technology general controls and management information systems. This control improvement was implemented to address a material weakness identified by management relating to insufficient documentation of our information technology general control environment, and this control improvement has been operating effectively for a sufficient period to address the material weakness that was first identified by management in the year ended December 31, 2009.
2. We have provided technical training to our accounting personnel relating to the appropriate accounting requirements for Redeemable Convertible Preference Shares. This control improvement was implemented to address a material weakness identified by management relating to reliance on our external auditors to review and adjust the Company's accounting and related financial disclosures regarding the Redeemable Convertible Preference Shares in our subsidiary, but it has not yet been operating effectively for a sufficient period to address the material weakness that was first identified by management in the three months ended September 30, 2010.

## **Item 9B. Other Information**

None.

## PART III

### **Item 10. Directors, Executive Officers and Corporate Governance**

Information with respect to this item is incorporated by reference from our definitive proxy statement (or amendment to this Annual Report on Form 10-K) to be filed with the Commission within 120 days of the end of the fiscal year ended December 31, 2010.

### **Item 11. Executive Compensation**

Information with respect to this item is incorporated by reference from our definitive proxy statement (or amendment to this Annual Report on Form 10-K) to be filed with the Commission within 120 days of the end of the fiscal year ended December 31, 2010.

### **Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters**

Information with respect to this item is incorporated by reference from our definitive proxy statement (or amendment to this Annual Report on Form 10-K) to be filed with the Commission within 120 days of the end of the fiscal year ended December 31, 2010.

### **Item 13. Certain Relationships and Related Transactions, and Director Independence**

Information with respect to this item is incorporated by reference from our definitive proxy statement (or amendment to this Annual Report on Form 10-K) to be filed with the Commission within 120 days of the end of the fiscal year ended December 31, 2010.

### **Item 14. Principal Accountant Fees and Services**

Information with respect to this item is incorporated by reference from our definitive proxy statement (or amendment to this Annual Report on Form 10-K) to be filed with the Commission within 120 days of the end of the fiscal year ended December 31, 2010.



## PART IV

### Item 15. Exhibits and Financial Statement Schedules.

#### Financial Statement Schedules

All financial statement schedules are omitted because they are not applicable or the required information is shown in the financial statements or notes thereto.

#### Exhibits

The following Exhibits are being filed with this Annual Report on Form 10-K.

*In reviewing the agreements included as exhibits to this Form 10-K, please remember that they are included to provide you with information regarding their terms and are not intended to provide any other factual or disclosure information about the Company or the other parties to the agreements. The agreements may contain representations and warranties by each of the parties to the applicable agreement. These representations and warranties have been made solely for the benefit of the parties to the applicable agreement and:*

- should not in all instances be treated as categorical statements of fact, but rather as a way of allocating the risk to one of the parties if those statements prove to be inaccurate;*
- have been qualified by disclosures that were made to the other party in connection with the negotiation of the applicable agreement, which disclosures are not necessarily reflected in the agreement;*
- may apply standards of materiality in a way that is different from what may be viewed as material to you or other investors; and*
- were made only as of the date of the applicable agreement or such other date or dates as may be specified in the agreement and are subject to more recent developments.*

*Accordingly, these representations and warranties may not describe the actual state of affairs as of the date they were made or at any other time. Additional information about the Company may be found elsewhere in this Form 10-K and the Company's other public filings, which are available without charge through the SEC's website at <http://www.sec.gov>. See "Available Information."*

Exhibit Number	Exhibit Description	Filed Herewith	Incorporated by Reference			
			Form	Period Ending	Exhibit	Filing Date
2.1	Agreement and Plan of Merger and Reorganization, dated as of May 31, 2007, by and among WBSI, WaferGen Acquisition Corp., and WaferGen, Inc.		8-K		2.1	6/5/2007
2.2	Certificate of Merger of WaferGen Acquisition Corp. with and into WaferGen, Inc., dated May 31, 2007		8-K		2.2	1/16/2008
3.1	Certificate of Incorporation of WBSI		SB-2		3.1	8/9/2006
3.2	Certificate of Amendment to the Certificate of Incorporation of WBSI, dated January 31, 2007		8-K		3.1	2/1/2007
3.3	Bylaws of WBSI		SB-2		3.2	8/9/2006
4.1	Lockup Agreement dated January 14, 2008, among WBSI, Rodman & Renshaw LLC and R&R Biotech Partners LLC		SB-2/A		4.1	1/16/2008
10.1 †	Form of Warrants, made as of May 5, 2007, to purchase up to an aggregate of 115,424 shares of WBSI's Common Stock		10-K	12/31/09	10.1	3/22/10
10.2	Form of Common Stock Purchase Warrant issued to investors in a private placement, the initial closing of which was held on May 31, 2007		8-K		10.21	6/5/2007

Exhibit Number	Exhibit Description	Filed Herewith	Incorporated by Reference			
			Form	Period Ending	Exhibit	Filing Date
10.3	Form of Warrant issued to Placement Agent in connection with a private placement, the initial closing of which was held on May 31, 2007		8-K		10.22	6/5/2007
10.4 †	Employment Agreement dated May 31, 2007, between WBSI and Alnoor Shivji		8-K		10.26	6/5/2007
10.5	Securities Purchase Agreement, dated May 19, 2008, by and among WaferGen Bio-systems, Inc. and the purchasers identified on the signature pages thereto		8-K		10.1	5/21/2008
10.6	Form of Common Stock Purchase Warrant issued to investors identified in the Securities Purchase Agreement dated May 19, 2008		8-K		10.2	5/21/2008
10.7 †	WaferGen Bio-Systems, Inc. 2008 Stock Incentive Plan		8-K		10.1	7/3/2008
10.8 †	Form of Non-Qualified Stock Option award under 2008 Stock Incentive Plan		10-K	12/31/2008	10.35	3/27/2009
10.9	Share Subscription Agreement and Shareholders' Agreement dated May 8, 2008, by and among WaferGen Bio-systems, Inc., Malaysian Technology Development Corporation Sdn. Bhd. and WaferGen Biosystems (M) Sdn. Bhd.		10-Q	9/30/2008	10.1	11/14/2008
10.10	Put Agreement dated May 28, 2008, by and among WaferGen Bio-systems, Inc. and Holders of the Series A Redeemable Convertible Preference Shares in WaferGen Biosystems (M) Sdn. Bhd.		10-Q	9/30/2008	10.2	11/14/2008
10.11	Put Option Agreement dated May 28, 2008, by and among Alnoor Shivji and Malaysian Technology Development Corporation Sdn. Bhd.		10-Q	9/30/2008	10.3	11/14/2008
10.12 †	Letter Agreement dated January 16, 2009, by and between WBSI and Alnoor Shivji		10-K	12/31/2008	10.39	3/27/2009
10.13	Form of WBSI Distribution Agreement		10-K	12/31/2008	10.42	3/27/2009
10.14	Share Subscription Agreement dated April 3, 2009, by and among WaferGen Bio-systems, Inc., WaferGen Biosystems (M) Sdn. Bhd., Prima Mahawangsa Sdn. Bhd. and Expedient Equity Ventures Sdn. Bhd.		8-K		10.1	4/14/2009
10.15	Put Agreement dated April 3, 2009, by and among WaferGen Bio-systems, Inc. and Holders of Series B Redeemable Convertible Preference Shares in WaferGen Biosystems (M) Sdn. Bhd.		8-K		10.2	4/14/2009
10.16	Form of Put Option Agreement dated April 3, 2009, by and among Alnoor Shivji and Holders of Series B Redeemable Convertible Preference Shares in WaferGen Biosystems (M) Sdn. Bhd.		8-K		10.3	4/14/2009
10.17	Deed of Adherence to the Share Subscription and Shareholders' Agreement dated May 8, 2008, by and among WaferGen Bio-systems, Inc., WaferGen Biosystems (M) Sdn. Bhd., Prima Mahawangsa Sdn. Bhd., Expedient Equity Ventures Sdn. Bhd. and Malaysian Technology Development Corporation Sdn. Bhd.		10-Q	3/31/2009	10.4	5/12/2009
10.18	Form of Subscription Agreement between WaferGen Bio-systems, Inc., and the investors party thereto in connection with the Company's 2009 private placement offering of units of securities		10-Q	6/30/2009	10.5	8/10/2009
10.19	Form of Warrants to purchase shares of Common Stock of the Company, issued June 16, 2009, to investors in the Company's 2009 private placement offering of units of securities		10-Q	6/30/2009	10.6	8/10/2009
10.20	Registration Rights Agreement, dated June 16, 2009, between WaferGen Bio-systems, Inc., and the investors party thereto in connection with the Company's 2009 private placement offering of units of securities		10-Q	6/30/2009	10.7	8/10/2009
10.21	Form of Warrant to purchase shares of Common Stock of the Company, issued to Spencer Trask Ventures, Inc. and certain related parties in connection with the Company's 2009 private placement offering of units of securities		10-Q	6/30/2009	10.8	8/10/2009
10.22 †	Employment Separation Agreement, dated June 17, 2009, by and among Amjad Huda and WaferGen Bio-systems, Inc.		10-K	12/31/09	10.22	3/22/10
10.23 †	Employment Separation Agreement, dated June 17, 2009, by and among Victor Joseph and WaferGen Bio-systems, Inc.		10-K	12/31/09	10.23	3/22/10
10.24	Share Subscription Agreement dated July 1, 2009, by and among WaferGen Bio-systems, Inc., WaferGen Biosystems (M) Sdn. Bhd. and Kumpulan Modal Perdana Sdn. Bhd.		10-Q	9/30/2009	10.1	11/13/2009

Exhibit Number	Exhibit Description	Filed Herewith	Incorporated by Reference			
			Form	Period Ending	Exhibit	Filing Date
10.25	Put Agreement dated July 1, 2009, by and among WaferGen Bio-systems, Inc. and Holders of Series B Redeemable Convertible Preference Shares in WaferGen Biosystems (M) Sdn. Bhd.		10-Q	9/30/2009	10.2	11/13/2009
10.26	Put Option Agreement dated July 1, 2009, by and among Alnoor Shivji and Kumpalan Modal Perdana Sdn. Bhd.		10-Q	9/30/2009	10.3	11/13/2009
10.27	Deed of Adherence dated July 1, 2009, to the Share Subscription and Shareholders' Agreement dated May 8, 2008, and the Share Subscription Agreement dated April 3, 2009, by and among WaferGen Bio-systems, Inc., WaferGen Biosystems (M) Sdn. Bhd., Prima Mahawangsa Sdn. Bhd., Expedient Equity Ventures Sdn. Bhd., Malaysian Technology Development Corporation Sdn. Bhd. and Kumpalan Modal Perdana Sdn. Bhd.		10-Q	9/30/2009	10.4	11/13/2009
10.28 †	Employment Agreement, effective October 29, 2009, by and between the Company and Mona Chadha		10-Q	9/30/2009	10.5	11/13/2009
10.29	Lease Agreement by and between WaferGen, Inc. and LBA Realty Fund III-Company VII, LLC dated October 22, 2009		10-Q	9/30/2009	10.6	11/13/2009
10.30	Form of Subscription Agreement between WaferGen Bio-systems, Inc., and the investors party thereto in connection with the Company's December 2009 and January 2010 private placement offering of units of securities		S-1		10.58	3/2/2010
10.31	Form of Warrants to purchase shares of Common Stock of the Company, issued December 23, 2009, to investors in the Company's December 2009 and January 2010 private placement offering of units of securities		S-1		10.59	3/2/2010
10.32	Registration Rights Agreement, dated December 23, 2009, between WaferGen Bio-systems, Inc., and the investors party thereto in connection with the Company's December 2009 and January 2010 private placement offering of units of securities		S-1		10.60	3/2/2010
10.33	Securities Purchase Agreement, dated July 1, 2010, between WaferGen Bio-systems, Inc. and each investor party thereto in connection with the Company's July 2010 offering of units of securities		8-K		10.1	7/8/2010
10.34	Form of Warrants to purchase shares of Common Stock of the Company, issued July 7, 2010, to investors in the Company's July 2010 offering of units of securities		8-K		4.1	7/8/2010
10.35	Form of Warrant to purchase shares of Common Stock of the Company, issued July 7, 2010, to placement agents and certain related parties in connection with the Company's July 2010 offering of units of securities		10-Q	6/30/2010	10.3	8/16/2010
10.36 †	WaferGen Bio-Systems, Inc. 2008 Stock Incentive Plan, as amended		8-K		10.1	9/22/2010
10.37 †	Employment Agreement, effective September 3, 2010, by and between the Company and Donald Huffman		10-Q	9/30/2010	10.2	11/15/2010
10.38	Loan and Security Agreement, dated December 7, 2010, between Oxford Finance Corporation, Wafergen Inc. and WaferGen Bio-systems, Inc.		8-K		10.1	12/13/2010
10.39	Warrant to purchase shares of Common Stock of the Company, issued December 7, 2010, to Oxford Finance Corporation		8-K		10.2	12/13/2010
10.40	Share Subscription Agreement dated December 14, 2010, by and among WaferGen Bio-systems, Inc., WaferGen Biosystems (M) Sdn. Bhd. and Malaysian Technology Development Corporation Sdn. Bhd.		8-K		10.1	12/15/2010
10.41	Put Agreement dated December 14, 2010, by and among WaferGen Bio-systems, Inc. and Malaysian Technology Development Corporation Sdn. Bhd.		8-K		10.2	12/15/2010
10.42	Amended and Restated Shareholders' Agreement dated December 14, 2010, by and among WaferGen Bio-systems, Inc., WaferGen Biosystems (M) Sdn. Bhd., Malaysian Technology Development Corporation Sdn. Bhd. and Prima Mahawangsa Sdn. Bhd.		8-K		10.3	12/15/2010
21.1	Subsidiaries of the Registrant	X				
23.1	Consent of Independent Registered Public Accounting Firm	X				

Exhibit Number	Exhibit Description	Filed Herewith	Incorporated by Reference			
			Form	Period Ending	Exhibit	Filing Date
31.1	Rule 13a-14(a)/15d-14(a) Certification of principal executive officer	X				
31.2	Rule 13a-14(a)/15d-14(a) Certification of principal financial officer	X				
32.1	Section 1350 Certification of principal executive officer <i>(This certification is being furnished and shall not be deemed “filed” with the SEC for purposes of Section 18 of the Exchange Act, or otherwise subject to the liability of that section, and shall not be deemed to be incorporated by reference into any filing under the Securities Act or the Exchange Act, except to the extent that the Registrant specifically incorporates it by reference.)</i>	X				
32.2	Section 1350 Certification of principal financial officer <i>(This certification is being furnished and shall not be deemed “filed” with the SEC for purposes of Section 18 of the Exchange Act, or otherwise subject to the liability of that section, and shall not be deemed to be incorporated by reference into any filing under the Securities Act or the Exchange Act, except to the extent that the Registrant specifically incorporates it by reference.)</i>	X				

† Indicates a management contract or compensatory plan or arrangement.

## 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.

WAFERGEN BIO-SYSTEMS, INC.

Date: March 31, 2011

By: /s/ ALNOOR SHIVJI  
Alnoor Shivji  
*Chairman, President and Chief Executive Officer*

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

<u>SIGNATURE</u>	<u>TITLE</u>	<u>DATE</u>
<u>/s/ ALNOOR SHIVJI</u> Alnoor Shivji	Chairman, President and Chief Executive Officer (principal executive officer)	March 31, 2011
<u>/s/ DONALD HUFFMAN</u> Donald Huffman	Chief Financial Officer (principal financial officer and principal accounting officer)	March 31, 2011
<u>/s/ ROBERT CORADINI</u> Robert Coradini	Director	March 31, 2011
<u>/s/ DR. ROBERT HARIRI</u> Dr. Robert Hariri	Director	March 31, 2011
<u>/s/ DR. R. DEAN HAUTAMAKI</u> Dr. R. Dean Hautamaki	Director	March 31, 2011
<u>/s/ JOEL KANTER</u> Joel Kanter	Director	March 31, 2011
<u>/s/ MAKOTO KANESHIRO</u> Makoto Kaneshiro	Director	March 31, 2011
<u>Dr. Timothy Triche</u>	Director	

## EXHIBIT INDEX

Exhibit Number	Exhibit Description
21.1	Subsidiaries of the Registrant
23.1	Consent of Independent Registered Public Accounting Firm
31.1	Rule 13a-14(a)/15d-14(a) Certification of principal executive officer
31.2	Rule 13a-14(a)/15d-14(a) Certification of principal financial officer
32.1	Section 1350 Certification of principal executive officer <i>(This certification is being furnished and shall not be deemed “filed” with the SEC for purposes of Section 18 of the Exchange Act, or otherwise subject to the liability of that section, and shall not be deemed to be incorporated by reference into any filing under the Securities Act or the Exchange Act, except to the extent that the Registrant specifically incorporates it by reference.)</i>
32.2	Section 1350 Certification of principal financial officer <i>(This certification is being furnished and shall not be deemed “filed” with the SEC for purposes of Section 18 of the Exchange Act, or otherwise subject to the liability of that section, and shall not be deemed to be incorporated by reference into any filing under the Securities Act or the Exchange Act, except to the extent that the Registrant specifically incorporates it by reference.)</i>

SUBSIDIARIES OF THE REGISTRANT

Wafergen, Inc.

WaferGen Biosystems (M) Sdn. Bhd.

WaferGen Biosystems R & D Sdn. Bhd. (Inactive)

**Consent of Independent Registered Public Accounting Firm**

We have issued our report dated March 31, 2011, with respect to the consolidated financial statements included in the Annual Report of WaferGen Bio-systems, Inc. on Form 10-K for the year ended December 31, 2010. We hereby consent to the incorporation by reference of said report in the Registration Statements of WaferGen Bio-systems, Inc. on Form SB-2 (File No. 333-146239), Forms S-1 (File Nos. 333-162470 and 333-165155), Form S-3 (File No. 333- 167165), and Forms S-8 (File Nos. 333-152597, 333-164558 and 333-170029).

/s/ Rowbotham and Company LLP

San Francisco, California  
March 31, 2011



CERTIFICATION

I, Alnoor Shivji, certify that:

1. I have reviewed this annual report on Form 10-K of WaferGen Bio-systems, Inc.;
2. Based on my knowledge, this 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(s) 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 (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting;
5. The registrant's other certifying officer(s) 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 the 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 information; 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 31, 2011

/s/ Alnoor Shivji  
Alnoor Shivji  
Chief Executive Officer  
(principal executive officer)

CERTIFICATION

I, Donald Huffman, certify that:

1. I have reviewed this annual report on Form 10-K of WaferGen Bio-systems, Inc.;
2. Based on my knowledge, this 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(s) 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 (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting;
5. The registrant's other certifying officer(s) 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 the 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 information; 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 31, 2011

/s/ Donald Huffman  
Donald Huffman  
Chief Financial Officer  
(principal financial officer)

CERTIFICATION  
PURSUANT TO 18 U.S.C. SECTION 1350,  
AS ENACTED BY  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 1350), I, Alnoor Shivji, certify that:

1. The Annual Report of WaferGen Bio-systems, Inc. (the "Company") on Form 10-K for the year ended December 31, 2010 (the "Report") as filed with the Securities and Exchange Commission as of the date hereof, 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 31, 2011

/s/ Alnoor Shivji  
Alnoor Shivji  
Chief Executive Officer  
(principal executive officer)

*A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to WaferGen Bio-systems, Inc., and will be retained by WaferGen Bio-systems, Inc., and furnished to the Securities and Exchange Commission or its staff upon request.*

CERTIFICATION  
PURSUANT TO 18 U.S.C. SECTION 1350,  
AS ENACTED BY  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 1350), I, Donald Huffman, certify that:

1. The Annual Report of WaferGen Bio-systems, Inc. (the "Company") on Form 10-K for the year ended December 31, 2010 (the "Report") as filed with the Securities and Exchange Commission as of the date hereof, 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 31, 2011

/s/ Donald Huffman  
Donald Huffman  
Chief Financial Officer  
(principal financial officer)

*A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to WaferGen Bio-systems, Inc., and will be retained by WaferGen Bio-systems, Inc., and furnished to the Securities and Exchange Commission or its staff upon request.*