

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

FORM 10-K

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

For the fiscal year ended September 30, 2014

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 001-36745

APPLIED DNA SCIENCES, INC.  
(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of  
incorporation or organization)

59-2262718

(I.R.S. Employer  
Identification No.)

50 Health Sciences Drive,  
Stony Brook, New York

(Address of principal executive offices)

11790

(Zip Code)

(631) 840-8800

(Registrant's telephone number,  
including area code)

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

Title of Each Class	Name of each Exchange on Which Registered
Common Stock, \$0.001 par value	NASDAQ Capital Market
Warrants to purchase Common Stock	NASDAQ Capital Market

Securities registered under Section 12(g) of the Act: None

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

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

Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company

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

The aggregate market value of the Registrant's common stock held by non-affiliates of the Registrant, based upon the last sale price of the common stock quoted on the OTC Bulletin Board as of the last business day of the Registrant's most recently completed second fiscal quarter (March 31, 2014), was approximately \$82 million. Shares of the Registrant's common stock held by each executive officer and director and by each entity or person that, to the Registrant's knowledge, owned 5% or more of the Registrant's outstanding common stock as of March 31, 2014 have been excluded in that such persons may be deemed to be affiliates of the Registrant. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of December 11, 2014, the Registrant had outstanding 17,309,702 shares of Common Stock, par value \$0.001 per share.

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## PART I

### Forward-looking Information

This Annual Report on Form 10-K (including the section regarding Management's Discussion and Analysis of Financial Condition and Results of Operations) contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, or Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or Exchange Act, and is subject to the "safe harbor" created by those sections. Forward-looking statements include statements using terminology such as "can", "may", "believe", "designated to", "will", "expect", "plan", "anticipate", "estimate", "potential" or "continue", or the negative thereof or other comparable terminology regarding beliefs, plans, expectations or intentions regarding the future. You should read statements that contain these words carefully because they:

- discuss our future expectations;
- contain projections of our future results of operations or of our financial condition; and
- state other "forward-looking" information.

We believe it is important to communicate our expectations. However, forward-looking statements involve risks and uncertainties and our actual results and the timing of certain events could differ materially from those discussed in forward-looking statements as a result of certain factors, including those set forth under "Risk Factors," "Business" and elsewhere in this report. All forward-looking statements and risk factors included in this document are made as of the date hereof, based on information available to us as of the date thereof, and we assume no obligations to update any forward-looking statement or risk factor, unless we are required to do so by law.

### ITEM 1. BUSINESS.

#### Overview

Using biotechnology as a forensic foundation, we create unique security solutions addressing the challenges of modern commerce. Whether working in supply chain security, brand protection or law enforcement applications, it is our goal to help establish secure flourishing environments that foster quality, integrity and success. With secure taggants, high-resolution DNA authentication, and comprehensive reporting, our botanical DNA-based technologies are designed to deliver what we believe to be the greatest levels of security, deterrence and legal recourse strength.

**SigNature® DNA.** SigNature DNA is our platform ingredient, at the core of all our security solutions. From application to application the vehicle that carries SigNature DNA is custom designed to suit the application. Exhaustive development efforts have yielded a flexible and durable marker with all the accuracy provided by nature. SigNature DNA is based on full, double stranded plant DNA, and provides forensic power and protection for a wide array of applications. Highly secure, robust and durable, SigNature DNA markers are an ingredient that can be used to fortify brand protection efforts; mark, track and convict criminals; and strengthen supply chain security. Custom DNA sequences can be embedded into a wide range of host carriers including ink, varnish, thread, laminates and metal coatings. These items can then be tested for the presence of SigNature DNA Markers through optical screening or a forensic level authentication. Hundreds of millions of SigNature DNA marks now exist in the public domain on items ranging from consumer product packaging to microcircuits to guitars. We believe that no marks have ever been copied.

SigNature DNA, SigNature® T DNA, fiberTyping®, DNAnet® and digitalDNA®, our principal anti-counterfeiting and product authentication solutions and our Counterfeit Prevention Authentication Program can be used in numerous industries, including microcircuits and other electronics, cash-in-transit (transport and storage of banknotes), textiles and apparel, automotive, printing and packaging, homeland security, law enforcement and home asset marking, identity cards and other secure documents, industrial materials, agrochemicals, pharmaceuticals, consumer products, food and beverage, fine wine, and art and collectibles.

**SigNature T DNA and fiberTyping.** There is one common thread that runs through the global textile industry: success breeds counterfeiting and diversion. SigNature T botanical DNA markers are used for brand protection efforts and raw material source compliance programs. In situations where natural fibers like cotton or wool are utilized, we can isolate and type inherent DNA, making it possible to verify the presence of specified materials. This fiberTyping process provides DNA verification to help manufacturers, retailers and brand owners ensure quality, safety and compliance of their products.

**DNAnet.** Recognizing that DNA-based evidence is the cornerstone of the modern era of law enforcement, we have created what we believe to be an effective crime fighting tool: DNAnet, a botanical DNA marker that can be used to definitively link evidence and offenders to specific crime scenes. Whether deployed as a residential asset marker, an offender spray or fog in a retail location or a degradation dye in cash handling boxes, DNA markers facilitate conviction, and establish a heightened level of deterrence. DNAnet, which includes our SmartDNA product line, is a unique security system and effective crime protection system for stores, warehouses, banks, pharmacies, ATMs and the protection of valuables. The system contains a water-based, non-toxic spray that may be triggered during a crime, marking the perpetrator and remaining on their person for weeks after the crime. Each unit is designed to be unique to each store, warehouse or sting operation, allowing the police and prosecutors to link criminals to the crimes. Assets acquired from RedWeb Technologies including Sentry 500 Intruder Spray Systems and Advanced Molecular Taggant Technology and our SmartDNA product line are now included in the DNAnet family of products.

**digitalDNA.** digitalDNA is a security solution that utilizes the flexibility of mobile communications, the instant accessibility of secure, cloud-based data, and the certainty of DNA to make item tracking and authentication fast, easy and definitive, while providing the opportunity to create a new customer interface. digitalDNA begins with a DNA-secured form of the QR ("quick read") code or other two dimensional code. A unique identification code is created for each article, and represented in an easy-to-read QR style barcode. The product uses forensic authentication of a botanical DNA marker, embedded within a secure QR code, and physically included within the ink used to digitally print the code. Should there ever be a question about the validity of a digitalDNA code, a laboratory-based analysis can be conducted to determine authenticity.

**Counterfeit Prevention Authentication Program.** Our turnkey program for electronics, military, commercial, and aerospace contractors called the Counterfeit Prevention Authentication Program ("CPA" Program) empowers end-users to verify the originality or provenance of parts that have been marked by their suppliers with our SigNature DNA Markers.

### **Corporate History**

We are a Delaware corporation, which was initially formed in 1983 under the laws of the State of Florida as Datalink Systems, Inc. In 1998, we reincorporated in Nevada, and in 2002, we changed our name to our current name, Applied DNA Sciences, Inc. In December 2008, we reincorporated from Nevada to the State of Delaware.

In November 2005, our corporate headquarters were relocated from Los Angeles, California to the Long Island High Technology Incubator at Stony Brook University in Stony Brook, New York, where we established laboratories for the manufacture of DNA markers and product prototypes, and DNA authentication. The address of our corporate headquarters is 50 Health Sciences Drive, Stony Brook, New York 11790, and our telephone number is (631) 240-8800. We maintain a website at [www.adnas.com](http://www.adnas.com) where general information about us is available. The information on, or that may be accessed through, our website is not incorporated by reference into and should not be considered a part of this report.

To date, we have had a limited operating history, and as a result, our operations have produced limited recurring revenues from our services and products; we have incurred expenses and have sustained losses.

### **Industry Background**

Counterfeiting, product diversion, piracy, forgery, identity theft, and unauthorized intrusion into physical locations and databases create significant and growing problems to companies in a wide range of industries as well as governments and individuals worldwide. Counterfeiting is a truly global problem and it is a problem that appears to be increasing. Revenues generated from counterfeit product sales are estimated to have grown by more than 400% since the early 1990s, while sales of legitimate brands grew just 50% over the same timeframe (The 2012 Global Report on Counterfeiting: Anti-Counterfeiting and The Apparel Industry — February 2012). The ICC (International Chamber of Commerce) in February 2011 issued an updated report on counterfeiting and piracy that states that the global economic and social impacts of counterfeiting and piracy could reach \$1.7 trillion by 2015 (the anti-piracy consortium Business Action to Stop Counterfeiting and Piracy (BASCAP) of the International Chamber of Commerce (ICC): "HP Anti-counterfeiting Africa Conference Impacts on Corporate World").

Counterfeiting is one of the fastest growing economic crimes of modern times. It presents companies, governments and individuals with a unique set of problems. What was once a cottage industry has now become a highly sophisticated network of organized crime that has the capacity to threaten the very fabric of national economies, endanger safety and frequently kill. It devalues corporate reputations, hinders investment, funds terrorism, and costs hundreds of thousands of people their livelihood every year.

As more and more companies begin to address the problem of counterfeiting, we expect that different systems will compete to be the leading standards by which products can be tracked across world markets. Historically, counterfeiting, product diversion and other types of fraud have been combatted by embedding various authentication systems and rare and easily distinguishable materials into products, such as radio frequency identification ("RFID") devices holograms in packaging, integrated circuit chips and magnetic strips in automatic teller machine cards, banknote threads on currency, elemental taggants in explosives, and radioactivity and rare molecules in crude oil. We believe these techniques are effective but have generally been reverse-engineered and replicated by counterfeiters, which limit their usefulness as forensic methods for authentication of the sources of products and other items.

### **Products and Services**

Every living organism has a unique DNA code that determines the character and composition of its cells. The core technologies of our business allow us to use the DNA of everyday plants to mark objects in a unique manner that we believe cannot be replicated, and then identify these objects by detecting the absence or presence of the DNA. SigNature DNA is at the core of all our security solutions. Our SigNature DNA consists of three steps: creating and encapsulating a specific encrypted DNA segment (sometimes with an associated "Optical Array" that allows for the rapid confirmation of the presence of our SigNature DNA), applying it to a product or other item (which may include derivative chemistries of the SigNature DNA that allow the DNA to permanently bind to the targeted substrate), and detecting the presence or absence of the specific segment (sometimes by the use of specific release agents). The first two steps are controlled exclusively by us and our certified agents to ensure the security of SigNature DNA Markers. Once applied, the presence of any of our SigNature DNA Markers can be detected by us or a customer in a simple spot test, or a sample taken from the product or other item can be analyzed forensically to obtain definitive proof of the presence or absence of a specific type of SigNature DNA Marker (e.g., one designed to mark a particular product).

## **Signature DNA Markers**

### *Creating a Customer or Product-Specific SigNature DNA Marker*

Our SigNature DNA Markers are custom manufactured by us to identify a particular class of or individual products or items. Each individual mark is recorded and stored in a secure database in order that we can later detect it. A single SigNature DNA mark will support at least ten authentications in its lifetime. The power of repeated use provides a fully documented audit or evidence trail.

Because DNA is one of the most dense information carriers known, only minute quantities of SigNature DNA are necessary for successful analysis and authentication. As a result, SigNature DNA can fold seamlessly into production and logistics workflows.

SigNature DNA has been subjected to rigorous testing by the Idaho National Laboratory, a U.S. National Laboratory, by CALCE, the largest electronic products and systems research center focused on electronics reliability, and by verified procedures in our labs. The forensic marker has passed all tests across a broad spectrum of materials and has met key military stability standards. SigNature DNA passed a strenuous "red-team" vetting on behalf of the U.S. Defense Logistics Agency.

Hundreds of millions of SigNature DNA marks now exist in the public domain on items ranging from consumer product packaging to microcircuits to guitars; to our knowledge, none has ever been copied.

### *SigNature DNA Encryption*

Our proprietary encryption system allows us to isolate strands of botanical DNA and then fragment and reconstitute them to form unique "DNA chimers", or encrypted DNA segments, whose sequences are known only to us.

### *SigNature DNA Encapsulation*

Our encapsulation system allows us to apply a protective coating to encrypted DNA chimers, creating a SigNature DNA Marker that is resistant to heat, cold, vibration, abrasion, organic solvents, chemicals UV radiation and other extreme environmental conditions, and so can be identified for hundreds of years after being embedded directly, or into media applied or attached to the item to be marked.

### *SigNature DNA Embedment*

Our embedment system allows us to incorporate our SigNature DNA Markers into a broad variety of media, such as inks, dyes, textile treatments, thermal ribbon thread, laminates, glues, threads, varnishes, adhesives and metal coatings.

### *SigNature DNA Authentication*

Our forensic level authentication methods allow us to unlock the encrypted DNA chimers by using PCR (polymerase chain reaction) techniques and proprietary primers that were specifically designed by us to detect the DNA sequences we encrypted and embedded into the product or other item. Detection of the DNA chimers unique to a particular item or series of items allows us to authenticate their origin.

### *Broad Applicability and Ingestible*

Our SigNature DNA Markers can be embedded into almost any consumer product, and virtually any other item. For instance, we believe the SigNature DNA we produce is safe to consume and can be used in pharmaceutical drug tablets and capsules. However, use of our SigNature DNA in ingestible products and drugs may require prior approval of the U.S. Food and Drug Administration ("FDA").

### *SigNature T DNA and fiberTyping*

Our scientific team was able to develop genotyping assays and protocols to identify DNA markers that are endogenous to a particular plant in order to differentiate between biological strains of cottons. In addition, in the case of Pima cotton, we have developed proprietary technologies to differentiate between Pima (*G. barbadense*) and Non-Pima (*G. hirsutum*) cotton with absolute certainty. In the process, we were also able to develop an approach to attach an exogenous DNA marker to a finished textile product (SigNature T).

## **SigNature T DNA**

SigNature T is a nearly-permanent, forensic identity marker that can be applied to any organic or synthetic fabric. The mark is applied to the fabric at the earliest stage in the supply chain, and can be used to authenticate the originality or origin of the fabric or apparel to which it is applied.

We have demonstrated how our SigNature T DNA can be used to authenticate textiles at all points of the supply chain through to the end user. In addition, we have demonstrated the integration of SigNature T DNA with existing manufacturing processes to produce threads, labels and fabrics manufactured by Yorkshire-based companies and are beginning to work on commercial projects with these companies.

SigNature T markers are precision-engineered and based on botanical (plant) DNA. Additional layers of protection and complexity are added to the mark in a proprietary manner. As for primers, the "key" to unlocking the identity of a particular SigNature T mark, that is unknown to the public and, for practical purposes, cannot be guessed, even by powerful computation. In fibers and fabrics, SigNature T cannot be removed even by harsh and prolonged washes. Similarly, SigNature T cannot be transferred from one garment to another. SigNature T DNA can be incorporated at any point in the textile supply chain as a means to link a genuine product to its original source of manufacture. Our botanical DNA markers can easily be applied to raw cotton fiber, thread, yarn, woven labels or to the finished garment. SigNature DNA is robust, and it can be formulated to be resistant to wash out treatments. Botanical DNA marked textile and apparel products are fully authenticated by our scientific team in our laboratories to ensure that they are truly genuine.

Our technology has proven useful in determining the authenticity of such commonly counterfeited products as Pima cotton and Yorkshire wool.

## **fiberTyping**

fiberTyping is not a marker, but a test of native cotton fiber (only), which gives a clear result that determines whether the original cotton DNA is present in your fiber, yarn or fabric. A small sample of the material, is sent to our labs, and analyzed.

Cotton classification and the authentication of cotton geographic origin are issues of global significance, important to brand owners and to governments that must regulate the international cotton trade. The use of DNA to identify the cotton fiber content of finished textiles is a significant opportunity for license holders to control their brand and for governments to improve their ability to enforce compliance with trade agreements between nations.

Retailers and consumers recognize products containing premium Extra Long Staple cotton, like Egyptian Giza, Peruvian and American Pima, as being the highest quality cotton in the industry. These refined high end cottons are well regarded due to their durability and quality which, in turn, typically commands premium pricing. In order to preserve the quality and performance of premium cotton products, cotton growers and manufacturers are using state-of-the-art technology, known as fiberTyping®, to verify that the original Extra Long Staple cotton fibers are used in the finished product. Just as a person's DNA specifies all of their unique qualities, biomaterials typically contain genomic DNA or fragments thereof that can be utilized to authenticate originality. We have developed a proprietary genetic-based assay and protocol to identify DNA markers that are endogenous (internal) to a particular product in order to differentiate between biological strains. Our fiberTyping offering enables our customers and potential clients to cost-effectively give assurance to manufacturers, suppliers, distributors, retailers and end-users that their products are authentic and that they are made from the fibers and textiles as labeled. Biomaterials can now be tracked from field to final purchase guaranteeing the authenticity of the item. As we are testing for innate genomic DNA, we believe these assays cannot be counterfeited. In addition to the global cotton trade, the markets for fiberTyping include biotherapeutics, nutraceuticals, natural foods, wines and fermented alcohols and other natural textiles.

We believe that our DNA extraction protocol and methodologies are more effective than existing forensic systems. We believe that the combination of our SigNature DNA and fiberTyping solutions covers the total authentication market, is applicable to multiple industry verticals, and can mark physical products on the front end and authenticate forensic DNA sequences on the back end.

## ***DNAnet***

Introduced in 2011, smartDNA, which is now a part of the DNAnet family, is a unique security system. DNAnet intruder tagging systems help to expand and strengthen any security effort by providing a means of directly linking criminals to crimes. In the event of a crime, the fleeing offender is sprayed with an indelible DNA-marked fluorescing dye. As the crime is investigated, the fluorescing DNA mark can assist police in linking the offender and stolen items to a specific crime scene, creating a greater ability to identify and convict. DNAnet tactical DNA product, in the form of DNA-marked fixative sprays and liquids as well as transferable grease, are being marketed to global police forces. DNAnet is a tactical forensic system providing unique DNA codes for covert operations that require absolute proof of authentication. Assets acquired from RedWeb Technologies, including Sentry 500 Intruder Spray System and Advanced Molecular Taggant Technology are included in the DNAnet family of products.

## ***digitalDNA***

digitalDNA® is a cloud-based security platform that utilizes the flexibility of mobile communications, the instant accessibility of data, and the absolute certainty of DNA as a backstop to make item tracking and authentication fast, easy and definitive.

Using a bar code or other automatic identification technology, goods are marked uniquely or to batch level or other characteristic determined by the customer. A cloud database stores codes and enables checks via smartphone or enterprise-level mobile computers. Separately, forensic botanical DNA markers can be physically included within the ink used to print the bar code. Should there ever be a question about the validity of a digitalDNA code, a laboratory-based analysis can be conducted to determine authenticity. Applications may include chain of custody tracking with geo-location option, authenticity check through a supply chain or consumer scan to check article information.

### ***Counterfeit Prevention Authentication (CPA) Program***

The program empowers end-users to verify the originality of parts which have been marked by their suppliers with our SigNature® DNA mark. The utilization of our technology has now reached the point where end-users in electronics — such as prime defense contractors and commercial manufacturers — are able to authenticate the SigNature DNA mark on incoming items even if those end-users did not themselves initiate the marking. In this context, the CPA Program provides an accessible and immediate action for companies whose suppliers are currently marking with SigNature DNA. Over 500,000 electronic parts have already been marked. These SigNature DNA-marked parts are now circulating in the electronics supply chain, providing end-users with unprecedented ability to identify parts or gain valuable traceability data.

### **Our Strategy**

To date, the substantial portion of our revenues has been generated from sales of our Signature DNA and fiberTyping, our principal anti-counterfeiting and product authentication solutions. We expect to continue to grow revenues from sales of our SigNature DNA, fibertyping, DNAnet and digitalDNA offerings. Key aspects of our strategy include:

#### *Customize and Refine our Solutions to Meet Potential Customers' Needs*

We are continuously improving and expanding our product offerings by testing the incorporation of our technologies into different media, such as newly configured labels, inks or packing elements, for use in new applications. Each prospective customer has specific needs and employs varying levels of existing security technologies with which our solution must be integrated. Our goal is to develop a secure and cost-effective system for each potential customer that can be incorporated into that potential customer's products or items themselves or their packaging so that they can, for instance, be tracked throughout the entire supply chain and distribution system.

#### *Continue to Enhance Detection Technologies for Authentication of our SigNature DNA Markers*

We have also identified and are further examining opportunities to collaborate with companies and universities to develop a new line of detection technologies that will provide faster and more convenient ways to authenticate our SigNature DNA Markers. The strength of our security solutions is based on a multi-layered architecture with DNA as a forensic foundation, optical markers for screening and detection, and barcode indicia for tracking within an IT system. We have active programs in each of these areas to deliver increased complexity to our mark against copying as well as to provide more information from each mark at a user's time and location of decision. In particular a next-generation optical mark reader, coupled with enhanced chemical markers, will be introduced for companies who desire to increase screening for our marked goods originating from or passing through their facilities.

#### *Target Potential High-Volume Markets*

We will continue to focus our efforts on target vertical markets that are characterized by a high level of vulnerability to counterfeiting, product diversion, piracy, fraud, identity theft, and unauthorized intrusion into physical locations and databases. Today our current target markets include microcircuits and other electronics, cash-in-transit (transport and storage of banknotes), textiles and apparel, automotive and, printing and packaging and our future target markets include homeland security, law enforcement and home asset marking, identity cards and other secure documents, industrial materials, agrochemicals, pharmaceuticals, consumer products, food and beverage, fine wine, and art and collectibles. If and when we have significantly penetrated these markets, we intend to expand into additional related high volume markets.

#### *Pursue Strategic Acquisitions and Alliances*

We intend to pursue strategic acquisitions of companies and technologies that strengthen and complement our core technologies, improve our competitive positioning, allow us to penetrate new markets, and grow our customer base. We also intend to work in collaboration with potential strategic partners in order to continue to market and sell new product lines derived from, but not limited to, DNA technology.

## Target Markets

We have begun offering our products and services in Europe, the United States and Asia. At the present time, we are focusing our efforts on microcircuits and other electronics, cash-in-transit, textile and apparel, automotive, and printing and packaging businesses. In the future, we plan to expand our focus to include homeland security, law enforcement and home asset marking, identification cards and other secure documents, industrial materials, agrochemicals, pharmaceuticals, consumer products, food and beverage, fine wine, and arts and collectibles.

## Present Markets:

### *Microcircuits and other electronics*

The global trade in recycled electronics parts is enormous and growing rapidly, driven by a confluence of cost pressures, increasingly complex supply chains and the huge growth in the amount of electronic waste disposed around the world, especially Asia. Recycled parts, relabeled and sold as new, threaten not only military systems but also commercial transportation systems, medical devices and systems, and the computers and networks that run today's financial markets and communications systems. The vast majority of counterfeits discovered in military equipment are semiconductors, the stamp-sized silicon wafers that act as the "brains" of nearly every type of modern electronic system. According to an article in DefenseOne (Counterfeits Can Kill U.S. Troops. So Why Isn't Congress and DoD Doing More to Stop it? — August 8, 2013), the U.S. military is an important consumer of these tiny products; a single F-35 Joint Strike Fighter jet is controlled by more than 2,500 semiconductors.

In 2011, the General Accounting Office (GAO) issued, under the name of an imaginary OEM, open RFPs on the internet for electronic parts (GAO — Report to the Committee on Armed Services — US Senate — February 2012). All of the part numbers requested were either post-production or entirely fictional. The GAO received seven prototype parts in response to its RFP: every single one was counterfeit. In the over \$300 billion semiconductor global market for 2013 this would amount to \$15 billion (Global Chip Revenue Rises in 2013, Reversing Loss from Earlier Year; Memory and Wireless Lead the Way — April 23, 2014). The proliferation of counterfeit parts in the supply chain has reached epidemic heights.

In a January 2013 report on a four-year study conducted between 2005 and 2008, the U.S. Department of Commerce revealed that 39% of 387 companies encountered counterfeit electronic components, microcircuits, or circuit boards. Some industry statistics even suggest that counterfeit parts account for 10% of all electronic equipment sold. In fact, counterfeiters are becoming far more adept at passing off bogus parts by leveraging the same sophisticated technologies that chip manufacturers use to produce authentic ones. Laser equipment re-marks parts appear as if they are products of a specific manufacturer with a later date code (Embedded Intel Solutions — Counterfeit Parts are on the Rise).

Since November 15, 2012, the Defense Logistics Agency ("DLA"), an Agency within the U.S. Department of Defense, requires that defense contractors provide items that have been marked with botanically-generated DNA produced by us or our authorized licensees. This requirement has been in place for items falling within Federal Supply Class (FSC) 5962, Electronic Microcircuits, which have been determined to be at high risk for counterfeiting.

On September 11, 2014, DLA announced that beginning on December 15, 2014, DLA will no longer issue solicitations requiring suppliers to provide DNA marked FSC 5962 microcircuits. Instead, DLA's Electronic Test Laboratory in Columbus, Ohio will DNA mark all FSC 5962 microcircuits. This change will create a centralized, streamlined DNA marking process within DLA. On November 13, 2014, we were awarded a contract by DLA to provide DLA with SigNature DNA marks and related equipment, services and training. We are working closely with DLA on a transition plan that may take approximately one year to accomplish.

The new DLA program to mark parts with our DNA product at their facility could contain financial risk to our company. The new program should also result in a far more streamlined, and scaled-up process, which could reduce certain costs by providing economies of scale, and benefits of marking technology geared to high-volume operations. It would, unlike today, be governed by a single direct contract with DLA.

### *Cash-in-Transit*

*Cash-in-transit businesses* transport and store cash and ATM cassettes. In the U.K. alone, there is an estimated £500 billion being transported each year, or £1.4 billion per day (British Security Industry Association: "Combating Cash Delivery Crime"). The nature of this business makes cash-in-transit an attractive target for criminals and as a result the industry invests in excess of £100 million per year in security equipment and devices. The incidence of cash-in-transit based crime had increased over 170% in London between 2005 and 2008, according to the Metropolitan Police. Governments and banks today face the real challenge of staying ahead of increasingly sophisticated counterfeiting without sacrificing security features and banknote longevity to costs. Since 2008, there have been thirty-two instances where criminals have been convicted of crimes where SigNature DNA forensic evidence has been provided to UK Police to assist them to secure convictions. These criminal cases have resulted in 91 offenders being convicted and receiving sentences totaling approximately 455 years of imprisonment. According to the FBI, in 2011 alone, more than \$30 million was stolen and just over 100 people were killed or injured in some 5,000 robberies of financial institutions across the nation (Bank Robbery: "Even in this High-tech Age, Old-fashioned Bank Robberies are Still a Cause for Concern").



We incorporate our SigNature DNA Markers in cash degradation inks that are used in the cash-in-transit industry in countries throughout Europe. This solvent-based ink marks bank notes if the cash box is compromised and has the ability to penetrate the bank notes rapidly and permanently. We believe our SigNature DNA Markers are more resilient and detectable than other competing technologies.

### ***Textiles and Apparel***

Cotton classification and the authentication of cotton geographic origin are issues of global significance, important to brand owners and to governments that must regulate international cotton trade. We believe that our SigNature T DNA and fiberTyping solutions could have significant potential applications for the enforcement of cotton trade quotas in the U.S. and across the globe, and for legislated quality improvement within the industry. We believe that similar issues face the wool and other natural product industries and have begun to introduce our products to these markets as well. In addition, our digitalDNA system can be used to provide track and trace capability for labels on finished garments to protect against counterfeiting and diversion.

According to Havocscope and the Coalition Against Counterfeiting and Piracy, the market value of counterfeit clothing is \$12 billion. In recent years, apparel accounted for 14% of the total counterfeit goods seized by U.S. agencies. Cass Johnson, with the National Council of Textile Organizations says counterfeit fabrics cost a billion dollars every year in lost tariffs to the United States. Britain's fashion industry is worth around \$57 billion to the economy, but counterfeit clothing and footwear is estimated to cost designer brands and retailers around \$5.4 billion each year.

Our SigNature T DNA anti-counterfeiting system for DNA marking and authentication of wool and cotton fibers is currently in use by our customers. We are now marking product in the United States and abroad to assure integrity of the textile supply chain. Our SigNature T commercial program involves the creation of a unique SigNature T DNA marker that will be used to mark one customer's Extra Long Staple Pima cotton at the ginning stage. Once marked, the premium cotton fiber may be authenticated for textile identity from grower to ginner to spinner to manufacturer to distributor to retailer. At each step of the process, its textile identity will be tested to link the original cotton fiber to finished product, preserving the authenticity of the product and the integrity of the supply chain.

### ***Automotive***

Car theft affects thousands of people each year and has more wide-ranging impacts than simply the loss of a vehicle. It can be a difficult and traumatic time for the victims and have many emotional as well as financial consequences. In addition to the car owner, motor vehicle crime also affects car manufacturers, law enforcement agencies, registration authorities, insurance companies, legislative bodies, justice departments and vehicle related businesses, such as rental companies and scrap yards.

Interpol reported that for the year ending December 31, 2013, they had received 7.2 million records of reported stolen motor vehicles from 130 different countries (Interpol — Database Statistics). According to the FBI, a motor vehicle was stolen in the United States every 44 seconds in 2012 and the value of the stolen motor vehicles was more than \$4.3 billion.

Car crime is a huge and profitable business, costing billions of dollars per year and representing approximately one third of all reported crime. It is estimated that approximately 70 percent of stolen cars are broken up and sold for spare parts, while the rest are given a false identity and sold, with many of those being exported to the Middle and Far East.

Our DNAnet product is currently being used to combat car theft. New cars are marked with a unique code applied at point of delivery to the customer and customer details are registered on a secure database. If the car is stolen and recovered, police would be able to link the criminal to the crime, and would know exactly where to return the vehicle. Highly visible warning stickers are displayed on the windshield of the car, deterring theft in the first place. Since 85% of stolen cars are taken after theft of car keys, other kinds of crime, such as home burglaries, also would be deterred.

Our SigNature DNA mark is being used to protect two European automotive manufacturers against the theft of automotive parts imported into at least one E.U. country. A unique, botanical DNA-based mark is designed and applied to multiple locations on the vehicle. The SigNature® DNA mark provides absolute identification for the vehicle, while also recording the name of the owner of that vehicle in a secure database. The marks are covert and difficult to remove. If found, vehicles and their component parts are traceable back to its owner and location, from anywhere on the globe.

### ***Printing and Packaging***

The scourge of counterfeiting in packaging has greatly intensified in recent years. Counterfeiting has spiked, causing detrimental health concerns for consumers, safety concerns for law enforcement agencies, and financial concerns for businesses worldwide. As a result, the global anti-counterfeit packaging market is estimated to reach approximately \$128.6 billion by the year 2019, according to MarketsandMarkets.

Billions of dollars per year are at stake for companies as they seek ways to ensure that the products sold with their logos and branding are authorized and authentic. The proliferation of counterfeiting requires brand owners and their converter/printer partners to work together to create a multi-layered protection plan so that their packaging and labels protect their brands and deter those trying to profit at their (and their reputation's) expense.

Counterfeiters have become so good at their unlawful activity that spotting the difference between legitimate and counterfeit products can be daunting. They have many ways to subvert legitimate brands. They may take an out-of-date — but legitimate — product and sell it in packaging and labels that have been faked. Sometimes, everything — including the packaging, labels and product itself — is counterfeit. Criminals might also use legitimate packaging with knock-off products.

We believe that our DNA taggants are the most advanced and secure technology available to the printing and packaging industries to combat counterfeit products. Our SigNature® DNA taggants offer a high level of security and flexibility in a cost-effective and easy-to-use format to suit the requirements and budget of any company. They can be either added to the substrate itself or to the ink or toner to act as a trace without impacting the quality of the ink or the substrate and without being able to be removed. A specialized reader is required to detect SigNature DNA and verify that a product is authentic. Our technology is versatile and is currently being used on packaging of food products by Nissha. Nissha uses SigNature DNA-based ink with its inkjet printing systems to help secure the fresh fish supply chain for the Ōita Fisheries Co-operative. The Ōita fish label is automatically linked to a central database that enables the food supplier, retailer as well as the end consumer to verify the original product information at the point of sale. In the future, it is our goal to be able to mark food and beverages directly with our safe and secure SigNature DNA taggants.

We have entered into a Certified Partner Program with six organizations. This program assures end-users of compliance with our standards for quality, reliability and security. The Program is organized into six Certified Partner category types: Marking, Printer, Equipment, Services, Test and Software Partners. Partnering with companies in each of these areas across an array of industries will provide a portfolio of solutions to the marketplace.

### ***Future Markets:***

#### ***Homeland Security***

The U.S. military is facing the challenge of the increasing intrusion of counterfeit electronics and other parts into its supply lines. This problem is not limited to electronics. Foreign suppliers using substandard materials could be producing rivets, bolts and screws that hold together everything from missile casings to ship ladders. The explosion of counterfeit parts is being driven by an expanding global economy and an emphasis on low-price contracting — both of which come as the U.S. Department of Defense is relying more heavily on older platforms, with parts that are becoming obsolete. The global semiconductor market has been estimated to be as large as \$300 billion per year, all subject to the risks of counterfeiting. The US Department of Defense is estimated to spend \$4 billion per year in the semiconductor market.

On September 9, 2010, Homeland Security Newswire published an article "Fake chips from China threaten U.S. military systems" in which a U.S. Chamber of Commerce estimate finds that the global market for counterfeit electronics may be as large as \$10 billion. While these references include daunting statistics, the underlying problem has not changed because there was no satisfactory technological solution. Senate hearings in November 2011 revealed the discovery of over 1,800 incidents, totaling over 1 million parts, of counterfeit electronic parts in the defense supply chain (Senate Armed Services Committee Releases Report on Counterfeit Electronic Parts — Monday May 21, 2012). According to the semiconductor industry, counterfeiting results in a \$7.5 billion loss in revenue annually as well as a loss of 11,000 U.S. jobs.

DNA-marking using our SigNature DNA marks, protects the consumer, the government and our service men and women. The manufacturers can ensure that only properly screened, original product goes to users. The same DNA marking can then protect the manufacturers themselves in the form of returned product which they must replace or repair. Broadly applicable, DNA marking could be disseminated as industry best practices and military standards.

Our SigNature DNA solution can provide secure, forensic, and cost-effective anti-counterfeiting, anti-piracy and identification solutions to military organizations and other companies supplying microelectronics and similar products globally in need of securing their supply chains.

#### ***Law Enforcement and Home Asset Marking***

Law enforcement organizations are always seeking a system they can use which will provide absolute proof of authentication. Specifically developed for covert operations, DNAet products form an invisible coating when applied to skin, plastics, metals, glass, wood and fabric.

Forensic marking of home assets uses technology to code valuables at risk of theft to mark burglars, linking them directly with a crime scene. Over the years, authorities have found it difficult to obtain convictions of thieves in possession of suspected stolen property unless the true owner can be identified. We believe that DNAet enhances law enforcement effectiveness by providing forensic quality evidence. We have been working with the UK Metropolitan Police Service (MPS) by providing DNAet property marking kits as part of a major initiative to reduce crime in targeted London neighborhoods. Pilot programs are also ongoing in Sweden.

Additional pilot studies are planned or ongoing, formulating our SigNature DNA to be used in other areas of law enforcement including non-lethal ammunition.

### ***Identification Cards and Secure Documents***

Governments are increasingly vulnerable to counterfeiting, terrorism and other security threats at least in part because currencies, identity and security cards and other official documents can be counterfeited with relative ease. For instance, Havocscope, a company that collects black market intelligence and identifies security threats, reports that the value of counterfeit identification and passports is currently \$100 million. (Havocscope — Fake IDs bought in the United States) Governments must also enforce the various anti-counterfeiting and anti-piracy regimes of their respective jurisdictions which becomes increasingly difficult with the continued expansion of global trade. Just to highlight the size of the problem, in April 2012 the European Parliament estimated that of the 6.5 million biometric passports in circulation in France between 500,000 and one million are 'false' having been obtained using counterfeit documents (Biometric National IDs and Passports: A False Sense of Security — June 19, 2012). Our SigNature DNA platform ingredient can provide secure, forensic, and cost-effective anti-counterfeiting, anti-piracy and identification solutions to local, state, and federal governments as well as the defense contractors and the other companies that do business with them. Our SigNature solution can be used for all types of identification and official documents, such as:

- passports;
- lawful permanent resident, or "green" cards;
- visas;
- drivers' licenses;
- Social Security cards;
- military identification cards;
- national transportation cards;
- security cards for access to sensitive physical locations; and
- other important identity cards, official documents and security-related cards.

### ***Industrial Materials***

The global polyolefin market is witnessing high growth on an account of increasing applications, technological advancements, and growing demand in the Asia-Pacific region. Polyolefins are largely used in industries such as film & sheet (food packaging, stretch & shrink films, trash bags, etc.), injection molding (packaging, automotive & transportation, consumables & electronics, building & construction, etc.), blow molding (blow molded bottles for juice, milk, motor oil, laundry detergents, etc.), and fibers & tapes (building & construction, etc.). Green polyolefins (mainly bio-polyethylene & bio-polypropylene), possess similar properties as that of petroleum-based polyolefin, are gaining popularity. (Polyolefin Markets by Types and Geography — Global Trends and Forecasts to 2018) Companies sell premium-quality plastic products, manufactured under the highest level of quality control and environmental safety control. Such high value products are prime candidates for counterfeiting via addition of cheap surrogates, manufactured as a low quality product with poor environmental safety control. Such counterfeit products would thus command premium pricing while compromising the prestige of the branded products. According to a new technical market research report, Global Market For Polyolefin Resins (PLS052A), from BCC Research, the global size of the polyolefin resins market was valued at \$151.1 billion in 2011. Total market value is expected to reach \$187.5 billion in 2016 after increasing at a five-year compound annual growth rate (CAGR) of 4.4%.

### ***Agrochemicals***

In Europe and other areas of the world use of counterfeit and illegally traded pesticides is increasing. Untested and unregulated products may threaten the health of farmers and consumers and pose risks to the natural environment. Counterfeit pesticides that make their way into the United States threaten the integrity of those industries that depend on the benefits of pesticide use.

Fighting counterfeit pesticides is a complex task. We believe that enforcement of European regulations governing pesticide use is inadequate and has led in recent years to an increase in use of illegal, counterfeit pesticides in European countries.

European Crop Protection Association statistics show that nearly 10% of the pesticides used in Europe are counterfeit and that their trafficking provides criminal organizations with an annual revenue of up to EUR 6 billion. According to a report by the European police cooperation body Europol, illegal products account for up to one quarter of all the crop protection products used in some Member States.

We are currently working in collaboration with a U.S.-based multinational company to SigNature DNA mark, protect and authenticate a crop protection product, and have initiated a pilot program to authenticate the SigNature DNA marker in the product itself, as well as verify the SigNature DNA-marked product after it is applied onto crops in the field. The value to the customer for this application is to ensure the quality and authenticity of the product, to minimize the risk of liability that might occur if the product is not used in compliance with the license agreement that is linked to the product, and ultimately, to ensure that the integrity of the customer's supply chain is preserved. We are in similar discussions with other multinational agrochemical companies to develop customized SigNature DNA programs for other herbicides, insecticides, fungicides and pesticides, although there can be no assurance that these discussions will be successful. We anticipate that these programs will begin with pilot studies that will provide the client with an understanding as to how the SigNature DNA marker and authentication program will perform in the product itself and in the field. We intend to market and sell programs for the digitalDNA track and trace system that can ensure the original product is linked to original packaging, and thus ensuring the integrity of the agrochemical supply chain.

### ***Pharmaceuticals***

The pharmaceutical industry also faces major problems relative to counterfeit, diluted, or falsely labeled drugs that make their way through healthcare systems worldwide, posing a health threat to patients and a financial threat to drugmakers and distributors. Counterfeit prescription pharmaceuticals are a growing trend, widely recognized as a public health risk and a serious concern to public health officials, private companies, and consumers. The National Association of Boards of Pharmacy estimates that counterfeit drugs account for 1–2% of all drugs sold in the United States. The World Health Organization (WHO) estimates the annual worldwide "take" from counterfeit drugs to be £13 billion (approximately \$20 billion USD), a figure that is expected to double by the end of this decade. In some countries, counterfeit prescription drugs comprise as much as 70% of the drug supply and have been responsible for thousands of deaths in some of the world's most impoverished nations, according to the WHO. Counterfeit pharmaceuticals are estimated to be a billion-dollar industry, though some estimate it to be much larger. In 2012, the WHO reported that in over 50% of cases, medicines purchased over the Internet from illegal sites that conceal their physical address have been found to be counterfeit (WHO: Medicines: Spurious/falsely-labelled/falsified/counterfeit (SFFC) medicines Fact Sheet June 2012). According to the WHO, counterfeiting can apply to both branded and generic products and counterfeit pharmaceuticals may include products with the correct ingredients but fake packaging, with the wrong ingredients, without active ingredients or with insufficient active ingredients.

Based on this growing threat, many countries have started to address vulnerabilities in the supply chain by enacting legislation which, among other things, requires a comprehensive system, most often referred to as serialization or in the United States as Drug Supply Chain Security. In November 2013, H.R.3204, the Drug Quality and Security Act was signed into law and placed responsibility on the FDA to regulate and monitor the manufacturing of compounded drugs, rather than letting states enact their own, sometimes conflicting standards. The FDA's proposed rules are in public feedback period now, with a timeline for adoption.

Drug Supply Chain Security and serialization requirements will be affecting all aspects of the pharmaceutical supply chain, starting with the manufacturer down through the packager, wholesaler, distributor and final dispensing entity. The laws provide an 'audit trail' (or documented evidence) to help to identify and catch counterfeiting and diversion. Serialization requires manufacturers, or in some virtual supply chains third-party packagers, to establish and apply to the smallest saleable unit package or immediate container a "unique identification number." In some cases, drug makers are spending as much as 8 to 10 per cent of a medicine pack's total production cost only on solutions to protect it from duplication and counterfeiting, according to company executives. Our unique DNA identifier mark-embedded in the ink of a unique serialized barcode can provide a layered security foundation for a customer solution in this market.

### ***Consumer Products***

Counterfeit items are a significant and growing problem with all kinds of consumer packaged goods, especially in the retail and apparel industries. According to the World Customs Organization, European clothing and footwear companies lose an estimated EUR 7.5 billion per year to counterfeiting and Havocscope values the counterfeit clothing market at \$12 billion (Havocscope — Counterfeit Clothing Market Value: \$12 billion). We have developed and are currently marketing a number of solutions aimed at brand protection and authentication for the retail and apparel industries, including the clothing, accessories, fragrances and cosmetics segments. Our SigNature DNA platform ingredient can be used by manufacturers in these industries to combat counterfeiting and piracy of primary, secondary and tertiary packaging, as well as the product itself, and to track products that have been lost in transit, whether misplaced or stolen.

### ***Food and Beverage***

Counterfeit food threats are becoming more common as supply chains become more global and as imaging and manufacturing technology become more accessible. There are numerous alarming examples of counterfeit foods that have been reported. For instance, long-grain rice is being labelled and sold as basmati rice, Spanish olive oil is being bottled and sold as Italian olive oil, and mixtures of industrial solvents and alcohol are being sold as vodka. In addition, herbal teas have been found to contain no herbs or tea and juices have been found to contain vegetable oil, which is used as a flame retardant, and labeled tuna turns out to be an unidentifiable concoction of random meats. Although many of these stories have emerged from the UK and Europe, the fake-food problem is also relevant in the United States.

The National Center for Food Protection and Defense estimates that Americans pay \$10 billion to \$15 billion annually for fake food — often due to product laundering, dilution and intentionally false labeling.

We believe our SigNature DNA taggants and authentication program can help in the battle against counterfeit foods and beverages. Our technology is versatile and is currently being used on packaging of food products by Nissha. Nissha uses SigNature DNA-based ink with its inkjet printing systems to help secure the fresh fish supply chain for the Ōita Fisheries Co-operative. The Ōita fish label is automatically linked to a central database that enables the food supplier, retailer as well as the end consumer to verify the original product information at the point of sale. In the future, it is our goal to be able to mark food and beverages directly with our safe and secure SigNature DNA taggants.

### ***Fine Wine***

Vintners and purveyors of fine wine are also vulnerable to counterfeiting or product diversion. We believe our SigNature solutions can provide vintners, purveyors of fine wines and organizations within the wine community several benefits:

- Verified authenticity increases potential customers' confidence in the product and their purchase decision;
- For the vintner, the SigNature solutions can strengthen brand support and recognition, and offers the potential for improved marketability and sales; and
- SigNature DNA Markers can be embedded in bottles, labels, or both at the winery, and easily authenticated at the location of the wine distributor or auctioneer.

### ***Art and Collectibles***

The artworks and collectibles markets are also particularly vulnerable to counterfeiting, forgery and fraud. New works are produced and then passed off as originating from a particular artistic period or source, authentic fragments are pieced together to simulate an original work, and existing works are modified in order to increase their purported value. Such phony artwork and collectibles are then often sold with fake or questionable signatures and "provenance," or documented ownership histories that confirm authenticity.

We believe our SigNature DNA Markers can safely be embedded in, and so can be used to designate and then authenticate, all forms of artwork and collectibles, including paintings, books, porcelain, marble, stone, bronzes, tapestries, glass and fine woodwork, including frames. We believe they can also be embedded in any original supporting documentation related to the artwork or collectible, the signature of the artist and any other relevant material that would provide provenance, such as:

- A signed certificate or statement of authenticity from a respected authority or expert on the artist;
- An exhibition or gallery sticker attached to the art or collectible;
- An original sales receipt;
- A film or recording of the artist talking about the art or collectible;
- An appraisal from a recognized authority or expert on the art or collectible; and
- Letters or papers from recognized experts or authorities discussing the art or collectible.

### **Sales and Marketing**

We have 11 employees engaged in sales and marketing, of which five are directly involved with sales. We expect to hire additional sales directors and/or consultants to assist us with sales and marketing efforts with respect to our target vertical markets in the areas of pharmaceuticals, printing and packaging and consumer asset marking.

### **Research and Development**

Our research and development efforts are primarily focused on incorporating DNA into carriers (such as ink or textile treatments), and authenticating DNA from the marked substrates. As part of this effort, we typically conduct feasibility and pilot testing to ensure that DNA application methods are compatible with the customer's manufacturing and logistic processes, and that they can be implemented in a cost effective manner. In some cases, the DNA application methods may undergo wash-out and/or adherence tests to ensure that DNA can be authenticated even if it is subjected to aggressive removal techniques. We are also actively involved in identifying new formulation development, and new application methods that provide even better adhesion of DNA to substrates, and more homogeneous distribution of the DNA onto the surface. In short, we have considerable experience working with a wide range of carriers and substrates, and authenticating them even years after they have been applied onto the surface. We believe that our continued development of new and enhanced technologies relating to our core business is essential to our future success. We incurred \$1,300,750, \$692,480 and \$432,669 on research and development activities for the years ended September 30, 2014, 2013 and 2012, respectively.

## Raw Materials and Suppliers

Our sources of raw materials include botanical sources of DNA that are readily available in nature, which we are able to replicate to use in our product offerings. In general, our customers provide their materials to us in their own packaging to which we include our DNA products and return to them in their own packaging.

## Manufacturing

We have the capability to manufacture SigNature DNA markers, covert DNA ink, and SigNature PCR kits at our laboratories in Stony Brook. We rely upon other companies to manufacture our overt color-changing DNA Ink. We also have in-house capabilities to complete all fiberTyping authentications.

## Distribution of our Products and Commercial Agreements

Our products are distributed the following ways:

- directly to the customer;
- to a designated third party trained to mark parts for military suppliers (at the request of the customer); and
- through a licensed distributor.

As of September 30, 2014, we entered into agreements with a few dozen customers to use Signature DNA markers in connection with the DLA program. These include customers at all nodes in the supply chain, including prime contractors, authorized distributors, independent distributors and manufacturers. Over 500,000 electronic components have been marked to this point. On November 13, 2014, we were awarded a contract by DLA to provide DLA with SigNature DNA marks and related equipment, services and training. We are working closely with DLA on a transition plan that may take approximately one year to accomplish.

**Office of the Secretary of Defense.** On August 28, 2014, we were awarded a two-year development contract by the Office of the Secretary of Defense on behalf of the Defense Logistics Agency ("DLA") in the amount of \$2.97 million. The Rapid Innovation Fund project will develop a single authentication platform — our Signature DNA and complementary technologies — to identify authentic products and deter counterfeits from infiltrating six Department of Defense Federal Supply Groups ("FSGs").

Those FSGs are, in order of risk to DLA:

1. FSG 59 (Electrical and Electronic Equipment Components)
2. FSG 31 (Bearings)
3. FSG 25 (Vehicular Equipment Components)
4. FSG 29 (Engine Accessories)
5. FSG 47 (Pipe, Tubing, Hose and Fittings)
6. FSG 53 (Hardware and Abrasives)

Our DNA marking solution currently protects items in DoD Federal Supply Class (FSC) 5962, Microcircuits. This project will demonstrate our authentication solutions for the other high-risk commodities above.

We will perform services such as development, test and evaluation, field trials, and transition to government operations.

**U.S. Missile Defense Agency.** On July 14, 2014, we were awarded a Phase II SBIR contract by the U.S. Missile Defense Agency to perform research and development for avoidance of counterfeit parts by expanding the scope and scale of its existing SigNature DNA® technology platform established in its Phase I SBIR contract for Federal Supply Class 5962 electronic components, and by developing an optical reader. The contract provides for monthly payments to us totaling approximately \$975,000 over a two year period.

**Borealis Agreement.** On March 31, 2014, we and Borealis AG, a provider of polyolefins, signed a termsheet for mutual development and cooperation regarding the supply of markers — and related additives — for polyolefin products. The cooperation between the parties will explore and test the feasibility of the project. The contract provides for initial payments to us aggregating \$350,000, comprised of development and exclusivity fees. The payment of further installments is dependent on achieving specific performance goals over a defined period of less than one year.

**3SI Agreement.** On August 9, 2011, we entered into a Supplier Agreement, dated as of August 3, 2011 (the "Supplier Agreement"), with 3SI Security Systems, Inc., a manufacturer and seller of asset protection security systems based on ink and smoke staining as well as GPS technology ("3SI"). On the same date, we also entered into a License Agreement with 3SI, dated as of August 3, 2011 (the "License Agreement"). Under the terms of the Supplier Agreement, 3SI will purchase DNA markers and related products ("Markers") from us to be incorporated into products subject to certain patents ("Licensed Patents") owned by 3SI (the "Products"). Pursuant to the License Agreement, 3SI granted a nonexclusive irrevocable license to us to make, have made, use, import, offer to sell and sell the Products. Under the terms of the Supplier Agreement, 3SI is permitted to purchase the Products from us from time to time pursuant to purchase orders. The purchase price for the Products will be as set forth in an applicable product schedule for the purchase orders and may be adjusted from time to time pursuant to the terms of the Supplier Agreement. Under the terms of the License Agreement, we agreed to pay an initial payment and royalties to 3SI based on the number of Products sold, with such royalties being subject to adjustment pursuant to the terms of the License Agreement. The terms of the Supplier Agreement and the License Agreement will continue until the expiration of the Licensed Patents, unless earlier terminated under the terms of the respective agreements. Under the terms of the Supplier Agreement, 3SI has the right to immediately terminate upon written notice to us in the event that we fail to continuously maintain a minimum number of Markers to be incorporated into the Products, or upon 30 days written notice to us. Under the terms of the License Agreement, 3SI has the right to immediately terminate upon written notice to us in the event that we fail to continuously maintain a minimum number of Markers, or fail to sell Markers to 3SI for incorporation into the Products for a certain time after being ordered. On March 28, 2014, the License Agreement of August 3, 2011 was terminated and replaced by a "New License Agreement". Pursuant to the New License Agreement, 3SI granted a nonexclusive irrevocable license to us to make, have made, use, import, offer to sell and sell the Products. No additional payments were made. Under the terms of the New License Agreement, 3SI has the right to immediately terminate upon written notice to us in the event that we fail to comply with the terms of the Supply Agreement.

**Nissha Agreement.** On December 14, 2009, we entered into a Supply Agreement with Nissha Printing Co., Ltd. ("Nissha"), an international printing company. In the agreement, we agreed to supply our authentication marks to Nissha to be incorporated into their printing ink. We received an initial fee, and we receive an annual fee and authentication mark fee for each unique authentication mark purchased. Additional fees may be received if more than 10 authentications per year are ordered by Nissha.

**C.F. Martin & Co. Agreement.** On July 18, 2011, we entered into a Joint Development Agreement, dated as of June 30, 2011 with C.F. Martin & Co., Inc., a designer and manufacturer of acoustic guitars, strings for acoustic guitars, and related guitar components and accessories ("Martin"). Under the terms of the agreement, we and Martin jointly developed, created and applied new techniques and know-how for labeling and authenticating guitars, guitar strings and related guitar components and accessories using DNA security markers created by us. Each party shall bear and be responsible for its own expenses and costs of the development and creation of the techniques and know-how. The agreement also provides that Martin shall purchase DNA security markers exclusively from us during the term of the agreement. The term of the agreement will continue until the parties agree that the development and creation of techniques or know-how for labeling guitars or guitar strings with DNA security markers is complete, unless either party terminates the agreement by giving at least sixty (60) days written notice to the other party.

**Defense Logistics Agency.** On June 17, 2011, we received approval and permission to disclose from the Defense Logistics Agency of the U.S. Department of Defense a time and material subcontract (the "Subcontract") that we entered into on June 2, 2011 with the Logistics Management Institute ("LMI"). Under the terms of the Subcontract, we performed work and services for LMI and the DLA relating to a program to demonstrate the functional, technical and business viability of DNA marking technology as an anti-counterfeiting measure by using it in the DLA microcircuit supply chain. The program was divided into six tasks and involves the preparation, implementation and evaluation of marking materials for microcircuit chips and packages, creation of a business case analysis, development of a pricing and transition plan and identification of feasible techniques to apply DNA marks in conjunction with laser marking. The period of performance of the Subcontract was from May 26, 2011 through November 26, 2012. We received payment of \$913,400 under this Subcontract through November 26, 2012, when the contract expired. On November 13, 2014, we were awarded a contract by DLA to provide DLA with SigNature DNA marks and related equipment, training and services.

**RedWeb Asset Purchase.** On May 10, 2013, we entered into an Asset Purchase Agreement (the "Asset Purchase Agreement") with RedWeb Technologies Limited ("RedWeb"), a corporation incorporated and registered under the laws of England & Wales, to purchase certain assets of RedWeb ("Purchased Assets") relating to its forensic tagging security system for a purchase price of £400,000 (\$624,080). We completed the acquisition of the Purchased Assets on the same day. The Purchased Assets include RedWeb's Sentry 500 Intruder Spray System, RedWeb's Advanced Molecular Taggant Technology and all products relating thereto, certain intellectual property and supplies relating to the foregoing. £40,000 (\$62,408) of the purchase price was held in escrow for up to one year to be applied against the indemnification obligations of RedWeb pursuant to the Asset Purchase Agreement. During May 2014, the escrow account was closed and we received £35,000 and paid RedWeb £5,000.

**Defense Contractor.** On October 4, 2013, we, as seller, entered into a master option agreement with one of the four largest American defense contractors, as buyer ("Buyer"), and committed to supply one (1) unique SigNature DNA provenance mark for Buyer and SigNature DNA ink for marking up to 25,000 electronic components/year, upon Buyer's request through the issuance of a purchase order. For the Buyer, the agreement is an enterprise-wide option to purchase. The term of the agreement commenced on October 3, 2013 and expires October 3, 2023. Buyer has engaged a third-party marker, which third-party marker is and must remain approved by us, to provide certain services to incorporate our ink onto certain electronic components of Buyer. Either party may terminate the agreement in the event of a material breach that is uncured for 30 days. We have received from Buyer one purchase order governed by these terms in the amount of \$62,000 thus far. The agreement severely restricts publicity on behalf of both parties.

## Competition

The principal markets for our offerings are intensely competitive. We compete with many existing suppliers and new competitors continue to enter the market. Many of our competitors, both in the United States and elsewhere, are major pharmaceutical, chemical and biotechnology companies, or have strategic alliances with such companies, and many of them have substantially greater capital resources, marketing experience, research and development staff, and facilities than we do. Any of these companies could succeed in developing products that are more effective than the products that we have or may develop and may be more successful than us in producing and marketing their existing products. Some of our competitors that operate in the anti-counterfeiting and fraud prevention markets include: American Bank Note Holographics, Inc., Applied Optical Technologies, Authentix, Brandwatch, ChromoLogic LLC, Collectors Universe Inc., ColloTYPE, Data Dot Technology, De La Rue Plc., Digimarc Corp., DNA Technologies, Inc., ID Global, Infomium AG, Inksure Technologies, L-1 Identity Solutions, Media Sec Technologies, Nanotech Security Corp, Nokomis, Inc. opSec Security Group plc., SelectaDNA, SmartWater Technology, Inc., Sun Chemical Corp, Tracetag, ProofTag SAS and Yottamark.

Some examples of competing security products include:

- *fingerprint scanner* (a system that scans fingerprints before granting access to secure information or facilities);
- *voice recognition software* (software that authenticates users based on individual vocal patterns);
- *cornea scanner* (a scanner that scans the iris of a user's eye to compare with data in a computer database);
- *face scanner* (a scanning system that uses complex algorithms to distinguish one face from another);
- *integrated circuit chip and magnetic strips* (integrated circuit chips that receive and, if authentic, send a correct electric signal back to the reader, and magnetic strips that contain information, both of which are common components of debit and credit cards);
- *optically variable microstructures* (these include holograms, which display images in three dimensions and are generally difficult to reproduce using advanced color photocopiers and printing techniques, along with other devices with similar features);
- *elemental taggants and fluorescence* (elemental taggants are various unique substances that can be used to mark products and other items, are revealed by techniques such as x-ray fluorescence); and
- *radioactivity and rare molecules* (radioactive substances or rare molecules which are uncommon and readily detected).

We expect competition with our products and services to continue and intensify in the future. We believe competition in our principal markets is primarily driven by:

- product performance, features and liability;
- price;
- timing of product introductions;
- ability to develop, maintain and protect proprietary products and technologies;
- sales and distribution capabilities;
- technical support and service;
- brand loyalty;
- applications support; and
- breadth of product line.

If a competitor develops superior technology or cost-effective alternatives to our products, our business, financial condition and results of operations could be significantly harmed.



## Proprietary Rights

We believe that our 23 patents, 47 patent applications, 27 registered trademarks, and 1 trademark application, and our trade secrets, copyrights and other intellectual property rights are important assets for us. Our patents will expire at various times between 2021 and 2025. The duration of our trademark registrations varies from country to country. However, trademarks are generally valid and may be renewed indefinitely as long as they are in use and/or their registrations are properly maintained.

However, there are events that are outside of our control that pose a threat to our intellectual property rights as well as to our products and services. For example, effective intellectual property protection may not be available in every country in which our products and services are distributed. The efforts we have taken to protect our proprietary rights may not be sufficient or effective. Any significant impairment of our intellectual property rights could harm our business or our ability to compete. Protecting our intellectual property rights is costly and time consuming. Any increase in the unauthorized use of our intellectual property could make it more expensive to do business and harm our operating results. Although we seek to obtain patent protection for our innovations, it is possible we may not be able to protect some of these innovations. Given the costs of obtaining patent protection, we may choose not to protect certain innovations that later turn out to be important. There is always the possibility that the scope of the protection gained from one of our issued patents will be insufficient or deemed invalid or unenforceable. We also seek to maintain certain intellectual property as trade secrets. This secrecy could be compromised by third parties, or intentionally or accidentally by our employees, which would cause us to lose the competitive advantage resulting from these trade secrets.

Additionally, litigation regarding patents and other intellectual property rights is extensive in the biotechnology industry. In the event of an intellectual property dispute, we may be forced to litigate. This litigation could involve proceedings instituted by the U.S. Patent and Trademark Office or the International Trade Commission, as well as proceedings brought directly by affected third parties. Intellectual property litigation can be extremely expensive, and these expenses, as well as the consequences should we not prevail, could seriously harm our business. If a third party claims an intellectual property right to technology we use, we might need to discontinue an important product or product line, alter our products and processes, pay license fees or cease our affected business activities. Although we might under these circumstances attempt to obtain a license to this intellectual property, we may not be able to do so on favorable terms, or at all.

## Employees

We currently have 51 full-time employees and eight part-time employees, including six in management, nine in research and development, one in life sciences, four in forensics, seven in quality assurance, five in finance and accounting, eight in operations, 11 in sales and marketing, one in human resources, two administrative, two in information services and three in investor relations and communications. We expect to increase our staffing dedicated to sales, manufacturing and production, and forensic authentication services. Expenses related to travel, marketing, salaries, and general overhead will be increased as necessary to support our growth in revenue. In order for us to attract and retain quality personnel, we anticipate we will have to offer competitive salaries and benefits to future employees. We anticipate that it may become desirable to add additional full and/or part time employees to discharge certain critical functions during the next 12 months. This projected increase in personnel is dependent upon our ability to generate revenues and obtain sources of financing. There is no guarantee that we will be successful in raising the funds required or generating revenues sufficient to fund the projected increase in the number of employees. As we continue to expand, we will incur additional costs for personnel. Since June 2012 we have been working with Insperty Inc. to help us manage many of our back-end administrative human resources and payroll responsibilities.

## Available Information

We are subject to the informational requirements of the Exchange Act, which requires us to file our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, amendments to such reports and other information with the Securities and Exchange Commission ("SEC"). This information is available at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Information on the operation of the Public Reference Room can be obtained by calling the SEC at 1-800-SEC-0330. Because we file documents electronically with the SEC, you may also obtain this information by visiting the SEC's website at: [www.sec.gov](http://www.sec.gov). Our website is located at: [www.adnas.com](http://www.adnas.com).

## ITEM 1A. RISK FACTORS.

Because of the following factors, as well as other variables affecting our operating results and financial condition, past financial performance may not be a reliable indicator of future performance, and historical trends should not be used to anticipate results or trends in future periods. In addition to the factors discussed elsewhere in this report and our other reports filed with the SEC, the following are important factors that could cause actual results or events to differ materially from those contained in any forward-looking statements made by us or on our behalf. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we deem immaterial also may impair our business operations. If any of the following risks or such other risks actually occurs, our business could be harmed.

## **Risks Relating to Our Business:**

***We have a short operating history, a relatively new business model, and have not produced significant revenues. This makes it difficult to evaluate our future prospects and increases the risk that we will not be successful.***

We have a short operating history with our current business model, which involves the marketing, sale and distribution of anti-counterfeiting and product authentication solutions. Our operations since inception have produced limited revenues, and may not produce significant revenues in the near term, or at all, which may harm our ability to obtain additional financing and may require us to reduce or discontinue our operations. If we create significant revenues in the future, we expect to derive most of such revenues from the sale of anti-counterfeiting and product authentication solutions, which are immature industries. You must consider our business and prospects in light of the risks and difficulties we will encounter as an early-stage operating company in a new and rapidly evolving industry. We may not be able to successfully address these risks and difficulties, which could significantly harm our business, operating results, and financial condition.

***We have a history of losses from operations which may continue, and which may harm our ability to obtain financing and continue our operations.***

We incurred operating losses of \$12.3 million and \$10.2 million for the years ended September 30, 2014, and 2013, respectively. These operating losses have principally been the result of the various costs associated with our selling, general and administrative expenses as we expanded operations, acquired, developed and validated technologies, expanded marketing activities, incurred interest expense on notes we issued to obtain financing and issued warrants with "reset" provisions. Our operations are subject to the risks and competition inherent in a company that moved from the development stage to an operating company. We may not generate sufficient revenues from operations to achieve or sustain profitability on a quarterly, annual or any other basis in the future. Our revenues and profits, if any, will depend upon various factors, including whether our existing products and services or any new products and services we develop will achieve any level of market acceptance. If we continue to incur losses, our accumulated deficit will continue to increase which might significantly impair our ability to obtain additional financing. As a result, our business, results of operations and financial condition would be significantly harmed, and we may be required to reduce or terminate our operations.

***We will require additional financing which may require the issuance of additional shares which would dilute the ownership held by our stockholders.***

We will need to raise funds through either debt or the sale of our shares in order to achieve our business goals. Any shares issued would further dilute the percentage ownership held by the stockholders. Furthermore, if we raise funds in equity transactions through the issuance of convertible securities which are convertible at the time of conversion at a discount to the prevailing market price, substantial dilution is likely to occur resulting in a material decline in the price of your shares. Our public offering during November 2014 resulted in dilution to investors and future offerings of securities could result in further dilution to investors.

***Our operating results could be adversely affected by a reduction in business with our customers that supply parts to the United States Defense Logistics Agency ("DLA").***

We derive a significant amount of revenues from a group of customers that supply FSC 5962 parts to DLA. Taken as a group, these customers were responsible for approximately 45%, 54% and 46% of our revenues for the years ended September 30, 2014, 2013 and 2012, respectively. As of December 15, 2014, DLA will DNA mark all FSC 5962 microcircuits at its Electronic Test Laboratory in Columbus, Ohio and will no longer issue solicitations requiring suppliers to provide DNA marked FSC 5962 microcircuits. On November 13, 2014, we were awarded a contract by DLA to provide DLA with a Signature DNA mark and related equipment, services and training. We are working with DLA to develop an appropriate transition plan to this new approach. Over time, this change could result in lower revenues and could adversely impact our business, financial condition or results of operations.

***Our operating results could be adversely affected by a reduction in business with our significant customers.***

Although no customer represented greater than 10% of our total revenues for the fiscal years ended September 30, 2014 or 2013, in the past we have derived a significant amount of revenues from a few customers. An aggregate of 54% of our total revenues for fiscal 2012 was attributable to two customers. In addition, our group of customers who supply FSC 5962 microcircuits to DLA, constituting 45% of our revenues for the fiscal year ended September 30, 2014, will most likely be reduced as a result of DLA's decision to DNA mark microcircuits at its own laboratory instead of issuing third party solicitations to suppliers. Generally our customers do not have an obligation to make purchases from us and may stop ordering our products and services or may terminate existing orders or contracts at any time with little or no financial penalty. The loss of any of our significant customers, any substantial decline in sales to these customers or any significant change in the timing or volume of purchases by our customers could result in lower revenues and could harm our business, financial condition or results of operations.

***If we are unable to obtain additional financing our business operations may be harmed or discontinued.***

Our continuation as a going concern is dependent upon our future revenues and our ability to commercialize more products, obtain additional capital and attain profitable operations. We will require additional funds to complete the continued development and commercialization of our products, product manufacturing, and to fund expected additional losses from operations, until revenues are sufficient to cover our operating expenses. If we are unsuccessful in obtaining the necessary additional financing, we will most likely be forced to reduce or terminate our operations.

***General economic conditions may adversely affect our business, operating results and financial condition.***

A general weakening or decline in the global economy or a period of economic slowdown may have serious negative consequences for our business and operating results. Since our customers incorporate our products into a variety of consumer goods, the demand for our products is subject to worldwide economic conditions and their impact on levels of consumer spending. Some of the factors affecting consumer spending include general economic conditions, unemployment, consumer debt, reductions in net worth, residential real estate and mortgage markets, taxation, energy prices, interest rates, consumer confidence and other macroeconomic factors. During a period of economic weakness or uncertainty, demand for consumer goods incorporating our products may weaken, and current or potential customers may defer purchases of our products. Although global economic conditions have improved somewhat since the extreme economic contraction in fiscal years 2008 and 2009, there is still significant uncertainty in the global economy, and there is no guarantee that the global economy will remain in this improved state.

While credit and financial markets seemed to have stabilized from their period of extreme distress, there can be no assurance that our liquidity will not be affected by changes in the financial markets and the global economy. Moreover, the recent crisis has had a significant material adverse impact on a number of financial institutions and has limited access to capital and credit for many companies. This could, among other things, make it more difficult for us to obtain, or increase our cost of obtaining, capital and financing for our operations. Our access to additional capital may not be available on terms acceptable to us or at all.

***Business disruptions could seriously harm our future revenue and financial condition and increase our costs and expenses.***

Our operations could be subject to earthquakes, power shortages, telecommunications failures, cyber-attacks or other vulnerabilities in our computer systems, terrorism, water shortages, tsunamis, floods, hurricanes, typhoons, fires, extreme weather conditions, medical epidemics, political or economic instability, and other natural or manmade disasters or business interruptions. The occurrence of any of these business disruptions could seriously harm our revenue and financial condition and increase our costs and expenses.

***If our existing products and services are not accepted by potential customers or we fail to introduce new products and services, our business, results of operations and financial condition will be harmed.***

There has been limited market acceptance of our botanical DNA encryption, encapsulation, embedment and authentication products and services to date. Some of the factors that will affect whether we achieve market acceptance of our solutions include:

- availability, quality and price relative to competitive solutions;
- customers' opinions of the solutions' utility;
- ease of use;
- consistency with prior practices;
- scientists' opinions of the solutions' usefulness; and
- general trends in anti-counterfeit and security solutions' research.

***The expenses or losses associated with the continued lack of market acceptance of our solutions will harm our business, operating results and financial condition.***

Rapid technological changes and frequent new product introductions are typical for the markets we serve. Our future success may depend in part on continuous, timely development and introduction of new products that address evolving market requirements. We believe successful new product introductions may provide a significant competitive advantage because customers invest their time in selecting and learning to use new products, and are often reluctant to switch products. To the extent we fail to introduce new and innovative products, we may lose any market share we then have to our competitors, which will be difficult or impossible to regain. Any inability, for technological or other reasons, to successfully develop and introduce new products could reduce our growth rate or damage our business. We may experience delays in the development and introduction of products. We may not keep pace with the rapid rate of change in anti-counterfeiting and security products' research, and any new products acquired or developed by us may not meet the requirements of the marketplace or achieve market acceptance.

***If we are unable to retain the services of Dr. Hayward or Dr. Liang, we may not be able to continue our operations.***

Our success depends to a significant extent upon the continued service of Dr. James A. Hayward, our Chairman, Chief Executive Officer and President, and Dr. Benjamin Liang, our Secretary and Strategic Technology Development Officer. We entered into an employment agreement with Dr. Hayward dated July 11, 2011. We do not have an employment agreement with Dr. Liang. Loss of the services of Drs. Hayward or Liang could significantly harm our business, results of operations and financial condition. We do not maintain key-man insurance on the lives of Drs. Hayward or Liang.

***The markets for our anti-counterfeiting and product authentication solutions are very competitive, and we may be unable to continue to compete effectively in these industries in the future.***

The principal markets for our anti-counterfeiting and product authentication solutions are intensely competitive. Many of our competitors, both in the United States and elsewhere, are major pharmaceutical, chemical and biotechnology companies, or have strategic alliances with such companies, and many of them have substantially greater capital resources, marketing experience, research and development staff, and facilities than we do. Any of these companies could succeed in developing products that are more effective than the products that we have or may develop and may be more successful than us in producing and marketing their existing products. Some of our competitors that operate in the anti-counterfeiting and fraud prevention markets include: American Bank Note Holographics, Inc., Applied Optical Technologies, Authentix, Collectors Universe Inc., Brandwatch, ColloTYPE, Data Dot Technology, De La Rue Plc., Digimarc Corp., DNA Technologies, Inc., ID Global, Infomium AG, Inksure Technologies, Kodak, L-1 Identity Solutions, Media Sec Technologies, opSec Security Group plc., SelectaDNA, SmartWater Technology, Inc., Sun Chemical Corp, Tracetag, ProofTag SAS and Yottamark.

We expect this competition to continue and intensify in the future. Competition in our markets is primarily driven by:

- product performance, features and liability;
- price;
- timing of product introductions;
- ability to develop, maintain and protect proprietary products and technologies;
- sales and distribution capabilities;
- technical support and service;
- brand loyalty;
- applications support; and
- breadth of product line.

If a competitor develops superior technology or cost-effective alternatives to our products, our business, financial condition and results of operations could be significantly harmed.

***We need to expand our sales, marketing and support organizations and our distribution arrangements to increase market acceptance of our products and services.***

We currently have a limited number of sales, marketing, customer service and support personnel and will need to increase our staff to generate a greater volume of sales and to support any new customers or the expanding needs of existing customers. The employment market for sales, marketing, customer service and support personnel in our industry is very competitive, and we may not be able to hire the kind and number of sales, marketing, customer service and support personnel we are targeting. Our inability to hire qualified sales, marketing, customer service and support personnel may harm our business, operating results and financial condition. While we have entered into a limited number of agreements with distributors, we may not be able to sufficiently build out a distribution network or enter into arrangements with qualified distributors on acceptable terms or at all. If we are not able to develop greater distribution capacity, we may not be able to generate sufficient revenue to support our operations.

***If a manufacturer fails to use acceptable labor practices, we might have delays in shipments or face joint liability for violations, resulting in decreased revenue and increased expenses.***

While we require our independent manufacturers to operate in compliance with applicable laws and regulations, we have no control over their ultimate actions. While our internal and vendor operating guidelines promote ethical business practices and our staff and buying agents periodically visit and monitor the operations of our independent manufacturers, we do not control these manufacturers or their labor practices. The violation of labor or other laws by our independent manufacturers, or by one of our licensing partners, or the divergence of an independent manufacturer's or licensing partner's labor practices from those generally accepted as ethical in the United States, could interrupt, or otherwise disrupt the shipment of finished products to us or damage our reputation. Any of these, in turn, could have a material adverse effect on our financial condition and results of operations, such as the loss of potential revenue and incurring additional expenses.

***Our research and development effort for new products may be unsuccessful.***

We incur research and development expenses to develop new products and technologies in an effort to maintain our competitive position in a market characterized by rapid rates of technological advancement. Our research and development efforts are subject to unanticipated delays, expenses and technical problems. There can be no assurance that any of these products or technologies will be successfully developed or that, if developed, will be commercially successful. In the event that we are unable to develop commercialized products from our research and development efforts or we are unable or unwilling to allocate amounts beyond our currently anticipated research and development investment, we could lose our entire investment in these new products and technologies. Any failure to translate research and development expenditures into successful new product introduction could have an adverse effect on our business.

***Failure to license new technologies could impair sales of our existing products or any new product development we undertake in the future.***

To generate broad product lines, it is advantageous to sometimes license technologies from third parties rather than depend exclusively on the development efforts of our own employees. As a result, we believe our ability to license new technologies from third parties may be important to our ability to offer new products. In addition, from time to time we are notified or become aware of patents held by third parties that are related to technologies we are selling or may sell in the future. After a review of these patents, we may decide to seek a license for these technologies from these third parties. There can be no assurance that we will be able to successfully identify new technologies developed by others. Even if we are able to identify new technologies of interest, we may not be able to negotiate a license on favorable terms, or at all.

***Our failure to manage our growth in operations and acquisitions of new product lines and new businesses could harm our business.***

The recent growth in our operations could place a significant strain on our current management resources. To manage such growth, we may need to improve our:

- operations and financial systems;
- procedures and controls; and
- training and management of our employees.

Our future growth, if any, may be attributable to acquisitions of new product lines and new businesses. For example, during fiscal 2013, we completed the purchase of certain assets and technology from RedWeb Technologies Limited relating to its forensic tagging security system. Future acquisitions, if successfully consummated, would likely create increased working capital requirements, which would likely precede by several months any material contribution of an acquisition to our net income. Our failure to manage growth or future acquisitions successfully could seriously harm our operating results. Also, acquisition costs could cause our quarterly operating results to vary significantly. Furthermore, our stockholders would be diluted if we financed the acquisitions by incurring convertible debt or issuing securities.

***A percentage of our sales occur outside of the U.S. As a result, we are subject to the economic, political, regulatory and other risks of international operations.***

For fiscal 2014 and 2013, 33% and 38%, respectively, of our revenue was from customers located outside of the U.S. We believe that the revenue from the sale of our products outside the U.S. will continue to grow in the near future. We intend to expand our international operations to the extent that suitable opportunities become available. Our foreign operations and sales could be adversely affected as a result of:

- nationalization of private enterprises and assets;
- political or economic instability in certain countries and regions;
- differences in foreign laws, including increased difficulties in protecting intellectual property and uncertainty in enforcement of contract rights;
- the possibility that foreign governments may adopt regulations or take other actions that could directly or indirectly harm our business and growth strategy;
- credit risks;
- currency fluctuations;
- tariff and tax increases;
- export and import restrictions and restrictive regulations of foreign governments;

- shipping products during times of crisis or wars; and
- other risks inherent in foreign operations.

***We are subject to numerous regulatory, legal, operational, and other risks as a result of our international operations which could adversely impact our businesses in many ways.***

As a U.S. company, we are required to comply with the economic sanctions and embargo programs administered by Office of Foreign Assets Control and similar multi-national bodies and governmental agencies worldwide, and the Foreign Corrupt Practices Act ("FCPA"). A violation of a sanction or embargo program or of the FCPA or similar laws prohibiting certain payments to governmental officials, such as the U.K. Bribery Act, could subject us, and individual employees, to a regulatory enforcement action as well as significant civil and criminal penalties which could adversely impact our business and operations.

***Failure to attract and retain qualified scientific, production and managerial personnel could harm our business.***

Recruiting and retaining qualified scientific and production personnel to perform and manage prototype, sample, and product manufacturing and business development personnel to conduct business development are critical to our success. In addition, our desired growth and expansion into areas and activities requiring additional expertise, such as clinical testing, government approvals, production, sales and marketing will require the addition of new management personnel and the development of additional expertise by existing management personnel. Because the industry in which we compete is very competitive, we face significant challenges attracting and retaining a qualified personnel base. Although we believe we have been and will be able to attract and retain these personnel, we may not be able to continue to successfully attract qualified personnel. The failure to attract and retain these personnel or, alternatively, to develop this expertise internally would harm our business since our ability to conduct business development and manufacturing will be reduced or eliminated, resulting in lower revenues. We generally do not enter into employment agreements requiring our employees to continue in our employment for any period of time.

***Our intellectual property rights are valuable, and any inability to protect them could reduce the value of our products, services and brand.***

Our patents, trademarks, trade secrets, copyrights and all of our other intellectual property rights are important assets for us. There are events that are outside of our control that pose a threat to our intellectual property rights as well as to our products and services. For example, effective intellectual property protection may not be available in every country in which our products and services are distributed. The efforts we have taken to protect our proprietary rights may not be sufficient or effective. Any significant impairment of our intellectual property rights could harm our business or our ability to compete. Protecting our intellectual property rights is costly and time consuming. Any increase in the unauthorized use of our intellectual property could make it more expensive to do business and harm our operating results. Although we seek to obtain patent protection for our innovations, it is possible we may not be able to protect some of these innovations. Given the costs of obtaining patent protection, we may choose not to protect certain innovations that later turn out to be important. There is always the possibility that the scope of the protection gained from one of our issued patents will be insufficient or deemed invalid or unenforceable. We also seek to maintain certain intellectual property as trade secrets. The secrecy could be compromised by third parties, or intentionally or accidentally by our employees, which would cause us to lose the competitive advantage resulting from these trade secrets.

***Intellectual property litigation could harm our business.***

Litigation regarding patents and other intellectual property rights is extensive in the biotechnology industry. In the event of an intellectual property dispute, we may be forced to litigate. This litigation could involve proceedings instituted by the U.S. Patent and Trademark Office or the International Trade Commission, as well as proceedings brought directly by affected third parties. Intellectual property litigation can be extremely expensive, and these expenses, as well as the consequences should we not prevail, could seriously harm our business.

If a third party claims an intellectual property right to technology we use, we might need to discontinue an important product or product line, alter our products and processes, pay license fees or cease our affected business activities. Although we might under these circumstances attempt to obtain a license to this intellectual property, we may not be able to do so on favorable terms, or at all. Furthermore, a third party may claim that we are using inventions covered by the third party's patent rights and may go to court to stop us from engaging in our normal operations and activities, including making or selling our product candidates. These lawsuits are costly and could affect our results of operations and divert the attention of managerial and technical personnel. A court may decide that we are infringing the third party's patents and would order us to stop the activities covered by the patents. In addition, a court may order us to pay the other party damages for having violated the other party's patents. The biotechnology industry has produced a proliferation of patents, and it is not always clear to industry participants, including us, which patents cover various types of products or methods of use. The coverage of patents is subject to interpretation by the courts, and the interpretation is not always uniform. If we are sued for patent infringement, we would need to demonstrate that our products or methods of use either do not infringe the patent claims of the relevant patent and/or that the patent claims are invalid, and we may not be able to do this. Proving invalidity, in particular, is difficult since it requires a showing of clear and convincing evidence to overcome the presumption of validity enjoyed by issued patents.

Because some patent applications in the United States may be maintained in secrecy until the patents are issued, because patent applications in the United States and many foreign jurisdictions are typically not published until eighteen months after filing, and because publications in the scientific literature often lag behind actual discoveries, we cannot be certain that others have not filed patent applications for technology covered by our or our licensor's issued patents or pending applications or that we or our licensors were the first to invent the technology. During the ordinary course of our business, we do not conduct "prior art" searches before filing a patent application. Our competitors may have filed, and may in the future file, patent applications covering technology similar to ours. Any such patent application may have priority over our or our licensors' patent applications and could further require us to obtain rights to issued patents covering such technologies. If another party has filed a United States patent application on inventions similar to ours, we may have to participate in an interference proceeding declared by the United States Patent and Trademark Office to determine priority of invention in the United States. The costs of these proceedings could be substantial, and it is possible that such efforts would be unsuccessful, resulting in a loss of our United States patent position with respect to such inventions.

Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on our ability to raise the funds necessary to continue our operations.

***Accidents related to hazardous materials could adversely affect our business.***

Some of our operations require the controlled use of hazardous materials for chemical reactions and synthesis. These materials are common to molecular/biological/chemical laboratories and require no special handling or regulation. Although we believe our safety procedures comply with the standards prescribed by federal, state, local and foreign regulations, the risk of accidental contamination of property or injury to individuals from these materials cannot be completely eliminated. In the event of an accident, we could be liable for any damages that result, which could seriously damage our business and results of operations.

***Potential product liability claims could affect our earnings and financial condition.***

We face a potential risk of liability claims based on our products and services. Though we have product liability insurance coverage which we believe is adequate, we may not be able to maintain this insurance at reasonable cost and on reasonable terms. We also cannot assure that this insurance, if obtained, will be adequate to protect us against a product liability claim, should one arise. In the event that a product liability claim is successfully brought against us, it could result in a significant decrease in our liquidity or assets, which could result in the reduction or termination of our business.

***Litigation generally could affect our financial condition and results of operations.***

We generally may be subject to claims made by and required to respond to litigation brought by customers, former employees, former officers and directors, former distributors and sales representatives, former consultants and vendors and service providers. We have faced such claims and litigation in the past and we cannot assure that we will not be subject to claims in the future. In the event that a claim is successfully brought against us, considering our lack of material revenue and the losses our business has incurred for the period from our inception to September 30, 2014, this could result in a significant decrease in our liquidity or assets, which could result in the reduction or termination of our business.

**Risks Relating to Our Common Stock:**

*There are a large number of shares of common stock underlying our outstanding options and warrants and the sale of these shares may depress the market price of our common stock and cause immediate and substantial dilution to our existing stockholders.*

As of December 11, 2014, we had 17,309,702 shares of common stock issued and outstanding and outstanding options and warrants to purchase 6,917,232 shares of common stock. The issuance of shares upon exercise of outstanding options and warrants will cause immediate and substantial dilution to the interests of other stockholders.

*We may require additional financing in the future, which may not be available or, if available, may be on terms that cause a decline in the value of our securities.*

If we raise capital in the future by issuing additional securities, investors may experience a decline in the value of their securities.

***If we fail to comply with the continuing listing standards of The NASDAQ Capital Market, our securities could be delisted.***

Our common stock and warrants are listed on the NASDAQ Capital Market under the symbols "APDN" and "APDNW," respectively. For our common stock and warrants to continue to be listed on the NASDAQ Capital Market, we must meet the current NASDAQ Capital Market continued listing requirements. If we were unable to meet these requirements, including, but not limited to, requirements to obtain shareholder approval of a transaction other than a public offering involving the sale or issuance equal to 20% or more of our common stock at a price that is less than the market value of our common stock, our common stock and warrants could be delisted from the NASDAQ Capital Market. If our securities were to be delisted from the NASDAQ Capital Market, our securities could begin to trade on the over-the-counter bulletin board or on the OTC Link, as the case may be. In such event, our securities could once again be subject to the "penny stock" rules which among other things require brokers or dealers to approve investors' accounts, receive written agreements and determine investor suitability for transactions and disclose risks relating to investing in the penny stock market. Any such delisting of our securities could have an adverse effect on the market price of, and the efficiency of the trading market for our securities, not only in terms of the number of shares that can be bought and sold at a given price, but also through delays in the timing of transactions and less coverage of us by securities analysts, if any. Also, if in the future we were to determine that we need to seek additional equity capital, it could have an adverse effect on our ability to raise capital in the public or private equity markets.

***Any material weaknesses in our internal control over financing reporting in the future could adversely affect investor confidence, impair the value of our common stock and increase our cost of raising capital.***

Any future failure to remedy deficiencies in our internal control over financial reporting that may be discovered or our failure to implement new or improved controls, or difficulties encountered in the implementation of such controls, could harm our operating results, cause us to fail to meet our reporting obligations or result in material misstatements in our financial statements. Any such failure could, in turn, affect the future ability of our management to certify that internal control over our financial reporting is effective. Inferior internal control over financial reporting could also subject us to the scrutiny of the SEC and other regulatory bodies which could cause investors to lose confidence in our reported financial information and could subject us to civil or criminal penalties or shareholder litigation, which could have an adverse effect on our results of operations and the trading price of our common stock.

In addition, if we or our independent registered public accounting firm identify deficiencies in our internal control over financial reporting, the disclosure of that fact, even if quickly remedied, could reduce the market's confidence in our financial statements and harm our share price. Furthermore, deficiencies could result in future non-compliance with Section 404 of the Sarbanes-Oxley Act of 2002. Such non-compliance could subject us to a variety of administrative sanctions, including review by the SEC or other regulatory authorities.

***We may be subject to claims for damages in connection with certain sales of shares of our common stock in the open market.***

There may have been inadvertent violations of federal and state securities laws in connection with certain sales of shares of our common stock in the open market pursuant to a registration statement on Form S-3 that we had filed to cover the resale of shares issued or to be issued that was declared effective by the Securities and Exchange Commission on July 31, 2013. On December 20, 2013, we filed our annual report on Form 10-K for the fiscal year ended September 30, 2013 (the "Original 2013 Form 10-K") which did not include the auditor attestation report on internal control over financial reporting required by Section 404(b) of Sarbanes-Oxley (the "Auditor Attestation Report"). On May 1, 2014, we filed a Form 10-K/A amendment to the Original 2013 Form 10-K in order to include the Auditor Attestation Report.

There were approximately three months when sales of shares may have occurred in open market transactions pursuant to our registration statement when the use thereof should have been suspended. Any such sales may have violated Section 5 or Section 12(a)(1) of the Securities Act and, as a result, we may be liable for claims for damages. In addition, the Securities and Exchange Commission and relevant state regulators could impose monetary fines or other sanctions on us as provided under relevant federal and state securities laws. The amount of such damages and penalties, if any, cannot be determined at this time. If the payment of damages or fines is significant, it could have a material, adverse effect on our cash flow, financial condition or prospects.

**ITEM 1B. UNRESOLVED STAFF COMMENTS.**

None.

**ITEM 2. PROPERTIES.**

On June 14, 2013, we entered into an operating lease agreement for a larger facility for our new corporate headquarters, located at the Long Island High Technology Incubator ("LIHTI"), which is located on the campus of Stony Brook University at 50 Health Sciences Drive, Stony Brook, NY 11790. The lease is for a 30,000 square foot building. The term of the lease commenced on June 15, 2013 and expires on May 31, 2016, with the option to extend the lease for two additional three-year periods. We also have operating leases for a laboratory in Huddersfield, England, which is currently inactive and Calverton, New York. The leases for both of these spaces are currently on a month to month basis.



**ITEM 3. LEGAL PROCEEDINGS.**

From time to time, we may become involved in various lawsuits and legal proceedings which arise in the ordinary course of business. However, litigation is subject to inherent uncertainties, and an adverse result in these or other matters may arise from time to time that may harm our business. We are currently not aware of any such legal proceedings that we believe will have, individually or in the aggregate, a material adverse effect on our business, financial condition or operating results.

*SmartWater, Ltd. v. Applied DNA Sciences, Inc.* (Civil Action No. 12-05731-JS-AKT, Eastern District of New York)

On August 24, 2012, SmartWater Limited ("SmartWater") filed a complaint for patent infringement against us in the United States District Court for the Southern District of Florida. It alleged that we infringed two of SmartWater's patents. Upon our motion, the case was transferred to the United States District Court for the Eastern District of New York. On June 26, 2013, SmartWater moved for leave to file an amended complaint. By memorandum and order dated September 27, 2013, the Court held that SmartWater had adequately stated claims for direct infringement, but dismissed the claims for contributory infringement with respect to both patents and induced infringement with respect to one patent.

On June 11, 2014, SmartWater filed a motion for an order dismissing its remaining patent infringement claims against us with prejudice. On July 18, 2014, we filed a request for an award of attorneys' fees. On September 29, 2014, the Court dismissed SmartWater's claims with prejudice and denied our request for attorneys' fees. As part of the dismissal, the Court ordered that SmartWater is permanently barred from suing us or any other entity with respect to the patents at issue as they relate to our products or services. SmartWater recovered nothing from us as a result of its suit.

**ITEM 4. MINE SAFETY DISCLOSURES.**

Not applicable.

## PART II

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

#### Market Information

Our common stock was quoted on The Over The Counter Market Group ("OTCQB") maintained by the National Association of Securities Dealers under the symbol "APDN" through November 14, 2014 and was listed on The NASDAQ Capital Market under the symbol "APDN" on November 17, 2014. Our warrants were listed on The NASDAQ Capital Market under the symbol "APDNW" on November 17, 2014. There is no certainty that the common stock and warrants will continue to be listed or that any liquidity exists for our stockholders.

The following table sets forth the quarterly quotes of high and low prices for our common stock on the OTCQB during the fiscal years ended September 30, 2013 and 2014. The following high and low sales prices of our common stock have been adjusted retroactively to reflect a one-for-60 reverse stock split that was effective on October 29, 2014.

	Fiscal 2013		Fiscal 2014	
	High	Low	High	Low
First Quarter	\$ 17.40	\$ 10.20	\$ 11.40	\$ 4.80
Second Quarter	\$ 13.80	\$ 7.80	\$ 10.80	\$ 7.20
Third Quarter	\$ 15.60	\$ 10.20	\$ 8.40	\$ 6.00
Fourth Quarter	\$ 12.00	\$ 5.40	\$ 7.80	\$ 5.40

#### Holder

As of December 11, 2014, we had approximately 681 holders of our common stock and 3 holders of our warrants. The number of record holders was determined from the records of our transfer agent and does not include beneficial owners of common stock whose shares are held in the names of various security brokers, dealers, and registered clearing agencies. The transfer agent of our common stock and warrants is American Stock Transfer & Trust Company, 6201 15th Avenue, Brooklyn, New York 11219.

#### Equity Compensation Plan Information

In 2005, the Board of Directors and the holders of a majority of the outstanding shares of Common Stock approved the 2005 Incentive Stock Plan. In 2007, 2008 and 2012, the Board of Directors and holders of a majority of the outstanding shares of Common Stock approved various increases in the number of shares of Common Stock that can be issued as stock awards and stock options thereunder to an aggregate of 5,833,334 shares and the number of shares of Common Stock that can be covered by awards made to any participant in any calendar year to 833,334 shares.

The 2005 Incentive Stock Plan is designed to retain directors, executives, and selected employees and consultants by rewarding them for making contributions to our success with an award of options to purchase shares of Common Stock. As of September 30, 2014, a total of 211,252 shares have been issued and options to purchase 3,350,780 shares have been granted under the 2005 Incentive Stock Plan.

#### Dividends

We have never declared or paid any cash dividends on our common stock. We do not anticipate paying any cash dividends to stockholders in the foreseeable future. In addition, any future determination to pay cash dividends will be at the discretion of the Board of Directors and will be dependent upon our financial condition, results of operations, capital requirements, and such other factors as the Board of Directors deem relevant.

#### Recent Sales of Unregistered Securities

On June 3, 2014, we closed a private placement of our Common Stock and warrants to purchase Common Stock with a group of investors, including members of our senior management team and the Board of Directors, pursuant to subscription agreements for gross proceeds of \$2,145,956 ("Private placement"). We issued and sold 312,257 shares of our Common Stock at a purchase price of \$6.87 per share and warrants to purchase 312,257 shares of Common Stock. The purchase price of the Common Stock represented a 5% discount to the volume weighted average closing price of the Common Stock from May 13, 2014 to May 16, 2014, which ranged from \$6.93 to \$7.47 per share during the period. The Warrants are exercisable at a price of \$8.25 per share (representing a 20% premium to the Purchase Price) for a period of one year and do not have cashless exercise provisions. The Common Stock purchased as well as the Common Stock to be issued upon exercise of the Warrants will be subject to the six month holding period provisions of Rule 144.

On July 8, 2014, we closed on an additional subscription agreement under this private placement, with the same terms as disclosed above. We issued and sold 1,500 shares of its Common Stock and warrants to purchase 1,500 shares of Common Stock for total proceeds of \$10,308.

As disclosed in Note E to the accompanying consolidated financial statements, on November 11, 2014, Dr. Hayward and the other individual agreed to exchange in reliance upon the exemption from registration provided by Section 3(a)(9) of the Securities Act their respective 12.5% Promissory Notes dated as of September 11, 2014 (including principal and accrued interest thereon) for 315,171 shares of common stock and warrants to purchase 315,171 shares of common stock, in the case of Dr. Hayward, and 252,137 shares of common stock and warrants to purchase 252,137 shares of common stock, in the case of the other individual, at \$3.25, the public offering price per share and warrant in our underwritten public offering, which closed on November 20, 2014. The Common Stock purchased as well as the Common Stock to be issued upon exercise of the Warrants will be subject to the six month holding period and other provisions of Rule 144.

Unless otherwise indicated, the foregoing issuances of Common Stock and warrants were exempt from registration under the Securities Act, pursuant to the exemption from registration provided by Section 4(a)(2) of the Securities Act and by Rule 506 of Regulation D promulgated under the Securities Act. Each investor represented that it was an "accredited investor" as that term is defined in Rule 501 of Regulation D.

## ITEM 6. SELECTED FINANCIAL DATA.

The selected historical financial data presented below under the heading "Consolidated Statement of Operations Data" and "Per Share Data" for the fiscal years ended September 30, 2014, 2013 and 2012 and selected financial data presented below under the heading "Consolidated Balance Sheet Data" as of September 30, 2014 and 2013 have been derived from, and are qualified by reference to, our audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K. The selected historical financial data presented below under the heading "Consolidated Statement of Operations Data" and "Per Share Data" for the years ended September 30, 2011 and 2010 and the selected historical financial data presented below under the heading "Consolidated Balance Sheet Data" as of September 30, 2012, 2011 and 2010 have been derived from, and are qualified by reference to, our audited consolidated financial statements which are not included in this Annual Report on Form 10-K.

The data set forth below should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our audited consolidated financial statements and the related notes thereto included elsewhere in this Annual Report on Form 10-K.

### Consolidated Statements of Operations Data

	Years Ended September 30,				
	2014	2013	2012	2011	2010
Revenues:	\$ 2,721,224	\$ 2,036,222	\$ 1,854,694	\$ 968,848	\$ 519,844
Operating expenses:					
Selling, general and administrative	13,249,753	11,198,505	7,615,734	8,388,873	7,189,020
Research and development	1,300,750	692,480	432,669	268,876	75,961
Depreciation and amortization	442,262	321,074	313,940	367,556	371,914
Total operating expenses	14,992,765	12,212,059	8,362,343	9,025,305	7,636,895
LOSS FROM OPERATIONS	(12,271,541)	(10,175,837)	(6,507,649)	(8,056,457)	(7,117,051)
Other income (expense):					
Interest income (expense), net	(11,029)	1,272	(643,063)	(2,458,667)	(792,549)
Other (expense) income, net	123,914	(3,761)	—	—	—
Loss on change in fair value of warrant liability	(908,005)	(7,508,146)	—	—	—
(Loss) income before provision for income taxes	(13,066,661)	(17,686,472)	(7,150,712)	(10,515,124)	(7,909,600)
Income taxes (benefit)	—	—	—	—	—
NET (LOSS) INCOME	\$ (13,066,661)	\$ (17,686,472)	\$ (7,150,712)	\$ (10,515,124)	\$ (7,909,600)
Net (loss) income per share:					
Basic and diluted	\$ (0.97)	\$ (1.51)	\$ (0.74)	\$ (1.67)	\$ (1.58)
Weighted average common shares outstanding:					
Basic and diluted	13,515,518	11,730,879	9,601,525	6,280,563	5,005,882

**Consolidated Balance Sheet Data**

	<b>As of September 30,</b>				
	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>
Current assets:					
Cash and cash equivalents	\$ 1,393,132	\$ 6,360,301	\$ 724,782	\$ 2,747,294	\$ 17,618
Accounts receivable, net of allowance	834,818	672,638	296,994	208,587	63,029
Prepaid expenses	135,365	174,096	80,037	76,290	161,456
Total current assets	<u>2,363,315</u>	<u>7,207,035</u>	<u>1,101,813</u>	<u>3,032,171</u>	<u>242,103</u>
Noncurrent assets	1,142,742	1,167,931	247,121	471,385	1,171,211
Total assets	<u>\$ 3,506,057</u>	<u>\$ 8,374,966</u>	<u>\$ 1,348,934</u>	<u>\$ 3,503,556</u>	<u>\$ 1,413,314</u>
Current liabilities:					
Accounts payable and accrued liabilities	\$ 1,494,759	\$ 966,977	\$ 592,009	\$ 768,061	\$ 967,550
Promissory notes payable	1,800,000	—	—	—	—
Advances from Officers	—	—	—	—	50,000
Convertible notes payable, net	—	—	—	3,730,880	1,774,080
Deferred revenue	583,362	148,503	—	—	—
Total current liabilities	<u>3,878,121</u>	<u>1,115,480</u>	<u>592,009</u>	<u>4,498,941</u>	<u>2,791,630</u>
Convertible note payable-related party, net 2013	—	—	—	—	219,714
Warrant liability	1,096,412	2,643,449	—	—	—
Total liabilities	<u>4,974,533</u>	<u>3,758,929</u>	<u>592,009</u>	<u>4,498,941</u>	<u>3,011,344</u>
Preferred stock	—	—	—	—	—
Common stock	13,937	13,109	10,770	7,889	5,773
Additional paid in capital	198,277,859	191,296,539	169,753,294	160,853,153	149,737,500
Accumulated deficit	(199,760,272)	(186,693,611)	(169,007,139)	(161,856,427)	(151,341,303)
Total stockholders' (deficit) equity	<u>(1,468,476)</u>	<u>4,616,087</u>	<u>756,925</u>	<u>(995,385)</u>	<u>(1,598,030)</u>
Total Liabilities and Stockholders' (Deficit) Equity	<u>\$ 3,506,057</u>	<u>\$ 8,374,966</u>	<u>\$ 1,348,934</u>	<u>\$ 3,503,556</u>	<u>\$ 1,413,314</u>

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

The following discussion should be read in conjunction with our Consolidated Financial Statements and Notes thereto, included elsewhere within this report. The Annual Report on Form 10-K contains forward-looking statements including statements using terminology such as "can", "may", "believe", "designated to", "will", "expect", "plan", "anticipate", "estimate", "potential" or "continue", or the negative thereof or other comparable terminology regarding beliefs, plans, expectations or intentions regarding the future. You should read statements that contain these words carefully because they:

- discuss our future expectations;
- contain projections of our future results of operations or of our financial condition; and
- state other "forward-looking" information.

We believe it is important to communicate our expectations. However, forward looking statements involve risks and uncertainties and our actual results and the timing of certain events could differ materially from those discussed in forward-looking statements as a result of certain factors, including those set forth under "Risk Factors," "Business" and elsewhere in this report. All forward-looking statements and risk factors included in this document are made as of the date hereof, based on information available to us as of the date thereof, and we assume no obligations to update any forward-looking statement or risk factor, unless we are required to do so by law.

All warrant, option, share and per share information in this report gives retroactive effect to a one-for-60 reverse stock split that was effective on October 29, 2014.

**Introduction**

Using biotechnology as a forensic foundation, we create unique security solutions addressing the challenges of modern commerce. Whether working in supply chain security, brand protection or law enforcement applications, it is our goal to help establish secure and flourishing environments that foster quality, integrity and success. With secure taggants, high-resolution DNA authentication, and comprehensive reporting, our botanical DNA-based technologies are designed to deliver what we believe to be the greatest levels of security, deterrence and legal recourse strength.

## General

To date, the substantial portion of our revenues has been generated from sales of Signature DNA and fiberTyping, our principal anti-counterfeiting and product authentication solutions. We expect to continue to grow revenues from sales of our SigNature DNA platform ingredient, our fibertyping, DNAet, and digitalDNA offerings and the Counterfeit Prevention Authentication Program. We have continued to incur expenses in expanding our laboratory and office facilities and increasing our personnel to meet current and anticipated future demand. We have limited sources of liquidity. We have developed or are currently attempting to develop business in the following target markets: microcircuits and other electronics, cash-in-transit (transport and storage of banknotes), textiles and apparel, automotive, printing and packaging, homeland security, law enforcement and home asset marking, identity cards and other secure documents, industrial materials, agrochemicals, pharmaceuticals, consumer products, food and beverage, fine wine, and art and collectibles. Our developments in the semiconductor authentication, cash-in-transit, polyolefins, and textile and apparel authentication have contributed to the increase in our revenues. We intend to pursue both domestic and international sales opportunities in each of these vertical markets.

### *Critical Accounting Policies*

Financial Reporting Release No. 60, published by the SEC, recommends that all companies include a discussion of critical accounting policies used in the preparation of their financial statements. While all these significant accounting policies impact our financial condition and results of operations, we view certain of these policies as critical. Policies determined to be critical are those policies that have the most significant impact on our consolidated financial statements and require management to use a greater degree of judgment and estimates. Actual results may differ from those estimates.

We believe that given current facts and circumstances, it is unlikely that applying any other reasonable judgments or estimate methodologies would cause a material effect on our condensed consolidated results of operations, financial position or liquidity for the periods presented in this report.

The accounting policies identified as critical are as follows:

- Revenue recognition;
- Equity based compensation;
- Fair value of financial instruments.

### *Revenue Recognition*

We recognize revenue in accordance with Accounting Standards Codification ("ASC") 605, Revenue Recognition ("ASC 605"). ASC 605 requires that four basic criteria must be met before revenue can be recognized: (1) persuasive evidence of an arrangement exists; (2) delivery has occurred and/or service has been performed; (3) the selling price is fixed and determinable; and (4) collectability is reasonably assured. Determination of criteria (3) and (4) are based on management's judgments regarding the fixed nature of the selling prices of the products delivered or services provided and the collectability of those amounts. Provisions for allowances and other adjustments are provided for in the same period the related sales are recorded. We defer any revenue for which the product has not been delivered, service hasn't been provided, or is subject to refund until such time that we and the customer jointly determine that the product has been delivered, service has been provided, or no refund will be required. At September 30, 2014, and 2013, we recorded deferred revenue of \$583,362 and \$148,503, respectively.

Revenue arrangements with multiple components are divided into separate units of accounting if certain criteria are met, including whether the delivered component has stand-alone value to the customer. Consideration received is allocated among the separate units of accounting based on their respective selling prices. The selling price for each unit is based on vendor-specific objective evidence, or VSOE, if available, third party evidence if VSOE is not available, or estimated selling price if neither VSOE nor third party is available. The applicable revenue recognition criteria are then applied to each of the units.

Revenue for government contract awards, which supports our development efforts on specific projects, is recognized as milestones under the contract are achieved as per the contract. We recognized revenue of approximately \$156,452, \$100,000 and \$0 from these contracts during the fiscal years ended September 30, 2014, 2013 and 2012, respectively.

### *Equity Based Compensation*

We follow Accounting Standards Codification subtopic 718, Compensation ("ASC 718") which requires all share-based payments to employees, including grants of employee stock options, and consultants, to be recognized in the statement of operations based on their fair values.

## ***Fair Value of Financial Instruments***

The valuation techniques utilized are based upon observable and unobservable inputs. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect internal market assumptions. These two types of inputs create the following fair value hierarchy:

Level 1 — Quoted prices in active markets for identical assets or liabilities.

Level 2 — Observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the related asset or liabilities.

Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of assets or liabilities.

We utilize observable market inputs (quoted market prices) when measuring fair value whenever possible.

For fair value measurements categorized within Level 3 of the fair value hierarchy, our accounting and finance department, who reports to the Chief Financial Officer, determine its valuation policies and procedures. The development and determination of the unobservable inputs for Level 3 fair value measurements and fair value calculations are the responsibility of our accounting and finance department and are approved by the Chief Financial Officer.

## ***Use of Estimates***

In preparing financial statements in conformity with accounting principles generally accepted in the United States of America, management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and revenue and expenses during the reporting period. Actual results could differ from those estimates.

## **Comparison of the Year Ended September 30, 2014 to the Year Ended September 30, 2013**

### **Revenues**

For the fiscal years ended September 30, 2014 and 2013, we generated \$2,721,224 and \$2,036,222 in revenues from operations, respectively. The increase in revenues of \$685,002 or 33.6% for the twelve months ended September 30, 2014 was primarily caused by revenue recognized of \$219,250 from a \$350,000 term sheet entered into with Borealis AG, a provider of polyolefins where we agreed to cooperate in the development and supply of markers and related additives for polyolefin products. The increase in revenue is also related to an increase in sales to suppliers of the DLA of approximately \$162,000 from renewals of existing contracts as well as the signing of new contracts. Revenue from military contract awards increased approximately \$56,000 for the fiscal year ended September 30, 2014 as compared to the same period in the prior year. To a smaller extent, the revenue increase is also attributable to an increase in fiber typing sales of approximately \$28,000.

### **Costs and Expenses**

#### ***Selling, General and Administrative***

Selling, general and administrative expenses for the fiscal years ended September 30, 2014 increased by \$2,051,248 or 18.3% to \$13,249,753 from \$11,198,505 in the same period in 2013. The increase is primarily attributable to an increase in payroll of approximately \$1.4 million due to an increase in fulltime employees from 47 as of September 30, 2013 to 51 fulltime employees as of September 30, 2014 and is also due to a full year of payroll expense during fiscal 2014 for the increase in headcount during fiscal 2013. The increase is also due to shares of common stock issued to a business strategy consultant for settlement of their fees during the fiscal year ended September 30, 2014 for \$337,501. Rent and related utilities expense increased by approximately \$273,000 as a result of our larger office space and our now paying utilities as compared to them being included as part of rent during the first half of the fiscal year ended September 30, 2013. Legal fees also increased by approximately \$234,000, related to legal fees incurred for the SmartWater litigation, as disclosed in footnote K of the accompanying consolidated financial statements.

#### ***Research and Development***

Research and development expenses increased by \$608,270 or 87.8% for the fiscal year ended September 30, 2014 compared to the same period in 2013 to \$1,300,750 from \$692,480. This increase is primarily due to the increased laboratory space with our new corporate headquarters, which resulted in additional expenses of approximately \$150,000, as well as an increase in research and development to support expansion of our business and markets of approximately \$455,000. In particular we have multiple workstreams in progress toward a launch of new products for field detection and rapid reading of optical marks which use the SigNature DNA ingredient.

### *Depreciation and Amortization*

In the fiscal year ended September 30, 2014, depreciation and amortization increased by \$121,188 or 37.7% compared to the same period in 2013 from \$321,074 for the fiscal year ended September 30, 2013 to \$442,262 for the fiscal year ended September 30, 2014. The increase is attributable to depreciation and amortization expense for the leasehold improvements and lab equipment purchased during the second half of the fiscal year ended September 30, 2013 related to the relocation of our corporate offices. The increase also relates to amortization for the intellectual property purchased from RedWeb Technologies during May 2013 and purchases of lab and computer equipment during the fiscal year ended September 30, 2014 of approximately \$220,000.

### *Total Operating Expenses*

Total operating expenses increased to \$14,992,765 for the fiscal year ended September 30, 2014 from \$12,212,059 in the same period of 2013, or an increase of \$2,780,706 or 22.8%, primarily attributable to an increase in salaries and in R&D expenditures, as more fully described above.

### *Interest (Expenses) Income*

Interest (expenses) income for the twelve months ended September 30, 2014, increased to expense of (\$11,029) from income of \$1,272 in the same period of 2013. The increase in interest (expense) income was due to the interest expense of \$11,875 for the promissory notes entered into on September 11, 2014 as discussed in note E of the accompanying consolidated financial statements.

### *Loss from Change in Fair Value of Warrant Liability*

Loss from change in fair value of warrant liability during the twelve months ended September 30, 2014 and 2013 was \$908,005 and \$7,508,146, respectively. These losses relate to warrants containing certain reset provisions which required us to classify them as liabilities and mark the warrants to market and record the change in fair value at each reporting period, and upon exercise as a non cash adjustment to our current period operations.

### *Net Loss*

Net loss for the twelve months ended September 30, 2014 was \$13,066,661 compared to \$17,686,472 in the same period of 2013, a decrease of \$4,619,811 or 26% primarily a result of the decrease in our loss on change in fair value of warrant liability as well as the combination of factors described above.

## **Comparison of the Year Ended September 30, 2013 to the Year Ended September 30, 2012**

### **Revenues**

For the years ended September 30, 2013 and 2012, we generated \$2,036,222 and \$1,854,694 in revenues from operations, respectively. The increase in revenues of \$181,528 or 9.8% for the twelve months ended September 30, 2013 was primarily caused by sales to suppliers of the DLA. In late January 2013, the DLA announced that it would subsidize marking costs for its trusted suppliers, and in March 2013, after this and other mechanisms were in place, we were able to begin shipments for this market. The sales to these third party suppliers during the year ended September 30, 2013 was offset by a decrease in sales due to the completion of our prior pilot contract with the Logistics Management Institute ("LMI"). Revenue during the twelve months ended September 30, 2013 included \$100,000 recognized from a development contract from the Missile Defense Agency.

### **Costs and Expenses**

#### *Selling, General and Administrative*

Selling, general and administrative expenses for the twelve months ended September 30, 2013 increased by \$3,582,771 or 47% to \$11,198,505 from \$7,615,734 in the same period in 2012. The increase is primarily attributable to higher professional fees, specifically for legal and consulting services, and additional salary expenses due to building an infrastructure for finance, production and information technology, to meet the anticipated future demand for sales. The increase is also attributable to increased rent expense due to the move into our new corporate headquarters. Bad debt expense increased to \$77,415 for the year ended September 30, 2013 as compared to \$0 for the year ended September 30, 2012.

#### *Research and Development*

Research and development expenses increased by \$259,811 or 60.0% for the year ended September 30, 2013 compared to the same period in 2012 to \$692,480 from \$432,669. This increase is primarily due to the increased laboratory space with our new corporate headquarters as well as an increase in research and development to support expansion of our business and markets.

### *Depreciation and Amortization*

In the twelve months ended September 30, 2013, depreciation and amortization increased by \$7,134 or 2.3% compared to the same period in 2012 from \$313,940 for the year ended September 30, 2012 to \$321,074 for the year ended September 30, 2013. The increase in depreciation expense for the year ended September 30, 2013 was attributable to the impairment of certain intellectual property purchased as part of the purchase of certain assets of RedWeb Technologies of approximately \$115,000. The increase is also due to depreciation and amortization expense for the leasehold improvements and lab equipment purchased during the year ended September 30, 2013 related to the relocation of our corporate offices. These increases were offset by the completion of the amortization of our intangible property, for which we incurred approximately \$270,000 of amortization expense during the year ended September 30, 2012 as compared to \$19,470 for the year ended September 30, 2013. The amortization during the year ended September 30, 2013 related to the intellectual property acquired from RedWeb Technologies.

### *Total Operating Expenses*

Total operating expenses increased to \$12,212,059 for the twelve months ended September 30, 2013 from \$8,362,343 in the same period of 2012, or an increase of \$3,849,716 or 46.0%, primarily attributable to an increase in professional fees, salaries and in R&D expenditures, as more fully described above.

### *Interest (Expenses) Income*

Interest (expenses) income for the twelve months ended September 30, 2013, decreased to income of \$1,272 from expense of (\$643,063) in the same period of 2012. The decrease in interest (expense) income was due to no outstanding notes payable as of September 30, 2013.

### *Loss from Change in Fair Value of Warrant Liability*

In November 2012 and July 2013, we issued warrants containing certain reset provisions which require us to classify them as a liability and mark the warrants to market and record the change in fair value each reporting period as a non-cash adjustment to our current period operations. This resulted in a \$7,508,146 charge to operations during the twelve months ended September 30, 2013 as compared to \$-0- for the same period in the prior year.

### *Net Loss*

Net loss for the twelve months ended September 30, 2013 was \$17,686,472 compared to \$7,150,712 in the same period of 2012, a net change of \$10,535,760 or 147.3% increase primarily a result of the loss on change in fair value of warrant liability as well as the combination of factors described above.

### **Comparison of the Year Ended September 30, 2012 to the Year Ended September 30, 2011**

#### *Revenues*

For the years ended September 30, 2012 and 2011, we generated \$1,854,694 and \$968,848 in revenues from operations, respectively. The increase in revenues of 91% for the twelve months ended September 30, 2012 was substantially generated from sales of our SigNature DNA and BioMaterial GenoTyping as a result of an increase in our customer base.

#### *Costs and Expenses*

##### *Selling, General and Administrative*

Selling, general and administrative expenses for the twelve months ended September 30, 2012 decreased 9.2% to \$7,615,734 from \$8,388,873 in the same period in 2011. Included within the selling, general and administrative expenses for the year ended September 30, 2012 was a noncash charge to operations of \$2,012,082 for the fair value of vested options issued to officers and employees and other stock based compensation compared to \$3,668,460 in 2011.

##### *Research and Development*

Research and development expenses increased by \$163,793 for the twelve months ended September 30, 2012 compared to the same period in 2011 from \$268,876 to \$432,669, primarily due to an increase in research and development activities to support our increased customer demand.



### *Depreciation and Amortization*

In the twelve months ended September 30, 2012, depreciation and amortization decreased by \$53,616 compared to the same period in 2011 from \$367,556 to \$313,940. The decrease is attributable to the expiring of the amortization of our intangible assets.

### *Total Operating Expenses*

Total operating expenses decreased to \$8,362,343 for the twelve months ended September 30, 2012 from \$9,025,305 in the same period of 2011, or a decrease of \$662,962, primarily due to decrease in stock based compensation expenses net with the increase in research and development compared to the same period last year.

### *Interest Expenses*

Interest expenses for the twelve months ended September 30, 2012, decreased to \$643,063 from \$2,458,667 in the same period of 2011, a decrease of \$1,815,604. The decrease in interest expense was due to reduction in the amortization of debt discounts attributable to our convertible notes of \$541,120 as compared to \$2,096,427 for the same period last year.

### *Net Loss*

Net loss for the twelve months ended September 30, 2012 was \$7,150,712 compared to \$10,515,124 in the same period of 2011, a net change of \$3,364,412 as a result of the combination of factors described above.

### **Liquidity and Capital Resources**

Our liquidity needs consist of our working capital requirements and research and development expenditure funding. As of September 30, 2014, we had working capital deficit of \$1,514,806. For the year ended September 30, 2014, we generated a net cash flow deficit from operating activities of \$8,512,738 consisting primarily of our loss of \$13,066,661, net with non-cash adjustments of \$442,262 in depreciation and amortization charges, \$2,033,341 for stock-based compensation, \$908,005 change in fair value of warrant liability, \$337,501 in common stock issued for consulting services and \$19,755 of bad debt expense. Additionally, we had a net increase in operating assets of \$149,583 and a net increase in operating liabilities of \$962,642. Cash used in investing activities was \$229,591 for the purchase of property, plant and equipment. Cash provided by financing activities was \$3,775,160, which included \$2,156,264 in proceeds from the sale of common stock related to a private placement and \$1,800,000 in proceeds from promissory notes. These were offset by \$181,104 in capitalized offering costs.

We have recurring net losses, which have resulted in an accumulated deficit of \$199,760,272 as of September 30, 2014. At September 30, 2014 we had cash and cash equivalents of \$1,393,132. Our current capital resources include cash and cash equivalents and other working capital resources. Historically, we have financed our operations principally from the sale of equity securities. We raised \$2,156,264 in a private placement of common stock and warrants and \$1,800,000 in promissory notes during the fiscal year ended September 30, 2014, including \$1,000,000 from a related party. See Notes H and E, respectively, of the accompanying consolidated financial statements. Also, as discussed in Note M to the accompanying consolidated financial statements, on November 20, 2014 the Company closed its underwritten public offering of common stock and warrants for gross proceeds of \$9.1 million. The Company utilized \$4,091,000 of these gross proceeds to repurchase the remaining Series B warrants from an investor, as discussed in Note F of the accompanying consolidated financial statements.

We expect to finance operations primarily through cash flows provided by operating activities provided that we achieve a sufficient level of future revenues. We estimate that our cash and cash equivalents are sufficient to fund operations for the next twelve months.

We will require additional funds to complete the continued development of our products, product manufacturing, and to fund expected additional losses from operations, until revenues are sufficient to cover our operating expenses. If we are unsuccessful in obtaining the necessary additional financing, we will most likely be forced to reduce operations.

We expect capital expenditures to be less than \$900,000 in fiscal 2015. Our primary investments will be in laboratory equipment to support prototyping, manufacturing, our authentication services, and outside services for our detector and reader development.

Substantially all of the real property used in our business is leased under operating lease agreements.

### **Commitments and Contingencies**

Our principal contractual obligations and commercial commitments at September 30, 2014, are summarized in the following charts. We have no other off-balance sheet commitments.

**Payments Due By Period**

<b>Contractual Obligations (in thousands)</b>	<b>Payments Due By Period</b>				
	<b>Total</b>	<b>Less Than 1 Year</b>	<b>1 – 3 Years</b>	<b>3 – 5 Years</b>	<b>Over 5 Years</b>
Lease commitments:					
Operating leases	\$ 769,351	\$ 468,548	\$ 300,803	\$ —	\$ —
Fixed common area maintenance	—	—	—	—	—
Total	<u>\$ 769,351</u>	<u>\$ 468,548</u>	<u>\$ 300,803</u>	<u>\$ —</u>	<u>\$ —</u>

**Recent Debt and Equity Financing Transactions**

**Fiscal 2014**

On September 11, 2014, we issued and sold promissory notes (the "Notes") in the aggregate principal amount of \$1,800,000 and bearing interest at a rate of 12.5% per annum to Dr. James A. Hayward, our President, Chairman and Chief Executive Officer, in the amount of \$1,000,000, and to another individual, in the amount of \$800,000, both of whom are "accredited investors" as defined in regulations promulgated under the Securities Act.

The Notes had a ten month maturity. Interest was payable in cash or in shares of common stock at the option of the holders of the Notes. The Notes could have been prepaid in whole or in part, at any time, subject to certain prepayment penalties. Upon an event of default, the Notes and all accrued interest thereon would have automatically converted into common stock at the closing price of the common stock on the date of issuance of the Notes. In the event of a consolidation or merger with another corporation in which we did not survive, the Notes would have been paid in full. On November 11, 2014, Dr. Hayward and the other individual agreed to exchange for cancellation their respective notes (including principal and accrued interest thereon) for 315,171 shares of common stock and warrants to purchase 315,171 shares of common stock, in the case of Dr. Hayward, and 252,137 shares of common stock and warrants to purchase 252,137 shares of common stock, in the case of the other individual, at \$3.25 per share, the aggregate public offering price per share and warrant of our underwritten public offering, which closed on November 20, 2014.

On June 3, 2014 we closed a private placement of our common stock and warrants to purchase common stock ("Warrants") with a group of investors (collectively the "Investors"), pursuant to subscription agreements for gross proceeds of \$2,145,956. We issued and sold 312,257 shares of common stock at a purchase price of \$6.87 per share ("Purchase Price") and Warrants to purchase 312,257 shares of common stock. The Purchase Price of the common stock represents a 5% discount to the volume weighted average closing price of the common stock from May 13, 2014 to May 16, 2014, which ranged from \$6.93 to \$7.47 per share during the period. The Warrants are exercisable at a price of \$8.25 per share (representing a 20% premium to the Purchase Price) for a period of one year and do not have cashless exercise provisions. The common stock purchased as well as the common stock to be issued upon exercise of the Warrants will be subject to the six month holding period provisions of Rule 144.

On July 8, 2014, we closed on an additional subscription agreement under this private placement, with the same terms as disclosed above. We issued and sold 1,500 shares of our common stock and warrants to purchase 1,500 shares of our common stock for total proceeds of \$10,308.

**Fiscal 2013 — Securities Purchase Agreements**

During the year ended September 30, 2013, we entered into two securities purchase agreements on November 28, 2012 (the "Initial Purchase Agreement") and July 19, 2013 (the "Second Purchase Agreement"), respectively, with an institutional investor ("Investor") to sell an aggregate of \$15.0 million (\$7.5 million per agreement) of our securities (collectively, the "Purchase Agreements"). The total net proceeds received under these two transactions were \$14.6 million (\$15 million gross proceeds, less investment fees of \$365,000). The table below summarizes the securities issued as part of the Purchase Agreements.

<b>Securities Issued</b>	<b>Initial Purchase Agreement</b>		<b>Second Purchase Agreement</b>	
	<b>Shares issued</b>	<b>Price per share</b>	<b>Shares issued</b>	<b>Price per share</b>
Common Stock	179,211	\$ 11.16	178,253	\$ 11.22
Series A Warrants	179,211	\$ 13.39	178,253	\$ 14.59
Series B Warrants	492,831	\$ 13.39	490,196	\$ 14.59
Series C Warrants	448,029	\$ 13.39	445,633	\$ 14.59
Series A Preferred Stock	5,500	\$ 1,000	—	\$ —
Series B Preferred Stock	—	\$ —	5,500	\$ 1,000

The Series A and Series B Preferred contained weighted average anti-dilution protection. The Series A and Series B Preferred did not accrue dividends. Our common stock was junior in rank to the Series A and Series B Preferred with respect to preferences as to dividends, distributions and payments upon the liquidation, dissolution and winding up of the Company. The Series A and Series B Preferred generally had no voting rights except as required by law. The Series A and Series B Preferred were converted into common stock as set forth below.

Investor could have exercised Series A and Series B Warrants by paying in cash or on a cashless basis by exchanging such Warrants for common stock using the Black-Scholes value and the then market price of the common stock. In the event that the common stock traded at a price 25% or more above the exercise price of the Series A and Series B Warrants for a period of 20 consecutive days (with average daily dollar volume of common stock on the OTC Bulletin Board at least equal to \$300,000), we could have obligated Investor to exercise such Warrants for cash.

Pursuant to the registration rights agreements with Investor, we filed registration statements within 30 days of the Initial Closing of the Purchase Agreements. The registration statements covered the resale of all shares of common stock issuable pursuant to the Purchase Agreements, including the shares of common stock underlying the Series A and Series B Preferred and Series A, B and C Warrants. We agreed to prepare and file amendments and supplements to the registration statements to the extent necessary to keep the registration statements effective for the period of time required under the Purchase Agreements. The registration rights agreements also contain provisions providing for monthly penalties of \$75,000 plus interest in certain circumstances, including in the event the prospectus contained therein is not properly available for any reason. On April 11, 2014, we made a payment of \$75,000 to Investor due to the suspension of use of the prospectus pending the filing of our Form 10-K/A containing the auditor attestation report on internal controls.

The Series A and Series B Preferred and the Series A, B and C Warrants each contained a 9.9% "blocker" so that in no event shall the Series A and Series B Preferred or any of the Series A, B and C Warrants be convertible or exercisable (including through the cashless exercise exchange provision) into or for common stock to the extent that such conversion or exercise would result in Investor having "beneficial ownership" (within the meaning of Section 13(d) of the Exchange Act) of more than 9.9% of the common stock. Investor, however, had the right from time to time to convert, exercise or exchange for shares of common stock, which over time would aggregate to greater than 9.9% beneficial ownership if all such shares of common stock so acquired had been held at one time by Investor.

On January 8, 2013, we exercised our option and converted the Series A Preferred into 424,383 shares of our common stock at a conversion price of \$12.96 per share and on April 25, 2013, Investor effected the cashless exercise of the Series A and Series B Warrants related to the Initial Purchase Agreement. Also, on August 14, 2013, we exercised our option and converted the Series B Preferred into 705,128 shares of our common stock at a conversion price of \$7.80 per share. On January 22, 2013, we exercised our option to repurchase the Series C Warrants related to the Initial Purchase Agreement and on August 14, 2013, we exercised our option to repurchase the Series C Warrants related to the Second Purchase Agreement for \$50,000 and \$10,000, respectively. See Subsequent Events below with respect to our repurchase of the unexercised portion of Investor's Series B Warrant.

### ***Fiscal 2012***

On June 21, 2012, we closed a private placement of our common stock. We issued and sold 592,943 shares of common stock at a purchase price of \$2.60 per share (which is equal to a 20% discount to the average volume, weighted average price of the common stock for the ten trading days prior to the closing) to an "accredited investor," as defined in regulations promulgated under the Securities Act, for gross proceeds of \$1,542,600.

On August 10, 2012, we closed a private placement of our common stock. We issued and sold 137,761 shares of our common stock at a purchase price of \$2.60 per share to "accredited investors," as defined in regulations promulgated under the Securities Act, for gross proceeds of \$358,400.

On September 27, 2012, we closed a private placement of our common stock. We issued and sold 18,688 shares of our common stock at a purchase price of \$10.70 per share to "accredited investors," as defined in regulations promulgated under the Securities Act, for gross proceeds of \$200,000.

### ***Subsequent Events***

On October 24, 2014, the Company filed a Third Certificate of Amendment of its Certificate of Incorporation with the Secretary of State of the State of Delaware that effected a one-for-60 (1:60) reverse stock split and a decrease in our authorized common stock, par value \$0.001 per share, from 1,350,000,000 to 500,000,000 shares, effective October 29, 2014.

On October 28, 2014, we entered into a warrant repurchase option agreement with Investor, pursuant to which we had the option to purchase between 50% and 100% of the unexercised portion of Investor's Series B Warrant (exercisable for 387,621 shares of common stock) at a purchase price of \$10.55 per share underlying such Series B Warrant (up to an aggregate purchase price of \$4,091,000 for all of the Series B Warrant). On November 21, 2014, following the closing of our underwritten public offering with gross proceeds of \$9.1 million, we exercised our option and repurchased 100% of Investor's Series B Warrant for an aggregate purchase price of \$4,091,000.

On November 11, 2014, Dr. James A. Hayward, our President, Chairman and Chief Executive Officer, and another individual agreed to exchange for cancellation their promissory notes in the amounts of \$1,000,000 and \$800,000, respectively, and accrued interest thereon for 315,171 shares of common stock and warrants to purchase 315,171 shares of common stock, in the case of Dr. Hayward, and 252,137 shares of common stock and warrants to purchase 252,137 shares of common stock, in the case of the other individual, at \$3.25 per share, the aggregate public offering price per share and warrant of our underwritten public offering described below.

On November 20, 2014, we closed an underwritten public offering in which 2,800,000 shares of common stock and warrants to purchase up to an aggregate of 2,800,000 shares of common stock were sold to the public for gross proceeds to us of \$9.1 million before deducting underwriting discounts and offering expenses payable by us. The Company utilized \$4,091,000 of the gross proceeds to repurchase the remaining Series B Warrants from Investor, as discussed in Note F of the accompanying consolidated financial statements. The public offering price for each share of common stock and each warrant was \$3.25. The warrants may be exercised for a period of five years and have a per share exercise price of \$3.50 per share of Common Stock. In connection with the offering, we granted to the underwriters a 45-day option to purchase up to 420,000 additional shares of common stock and/or up to 420,000 additional warrants to cover over-allotments, if any. Our common stock and warrants are listed on the Nasdaq Capital Market under the symbols "APDN" and "APDNW", respectively. In addition, we agreed to issue to the underwriters warrants to purchase 128,800 shares of common stock at an exercise price equal to \$3.73 per share. The Company had approximately \$1,212,000 of deferred offering costs as of December 15, 2014.

In connection with the closing of the offering, we entered into a Warrant Agreement with American Stock Transfer & Trust Company, LLC, as warrant agent ("Warrant Agreement"), pursuant to which American Stock Transfer & Trust Company, LLC has agreed to act as transfer agent with respect to the warrants for the Company. A copy of the Warrant Agreement is filed as Exhibit 4.1 and is incorporated herein by reference.

On November 20, 2014 we granted 83,334 options to purchase our Common Stock at an exercise price of \$2.69 per share for five years to a consultant, which vest immediately.

On December 3, 2014 Joseph D. Ceccoli was appointed to our Board of Directors.

#### **Product Research and Development**

We anticipate spending approximately \$1,250,000 for product research and development activities during the next twelve months. As disclosed elsewhere in this Form 10-K, on July 14, 2014 we were awarded a two-year Phase II SBIR contract by the U.S. Missile Defense Agency for \$975,000, and on August 28, 2014 we were awarded a two-year development contract for \$2.97 million by the Office of the Secretary of Defense on behalf of the Defense Logistics Agency. We also have pilot studies underway for industrial materials and textile companies.

#### **Acquisition of Plant and Equipment and Other Assets**

We do not anticipate the sale of any material property, plant or equipment during the next 12 months.

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

We do not have any off-balance sheet arrangements.

#### **Inflation**

The effect of inflation on our revenue and operating results was not significant.

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

##### ***Interest Rate Risk***

We do not believe we are exposed to material direct risks associated with changes in interest rates other than that with our cash and cash equivalents. At September 30, 2014 we had \$1,393,132 in cash and cash equivalents, the interest income from which is affected by changes in interest rates for the year ended September 30, 2014 was \$846.

##### ***Equity Risk***

We are exposed to market risk with respect to the valuation of our warrant liability with a fair value of \$1,096,412 at September 30, 2014. The fair value calculation, as discussed in footnote F of the September 30, 2014 consolidated financial statements, is exposed to market volatilities, changes in the price of our common stock and interest rates. Our loss on the change in fair value of the warrant liability for the year ended September 30, 2014 was \$908,005.

##### ***Foreign Exchange Risk***

The majority of our revenues and expenses are transacted in U.S. dollars. As a portion of our sales activities is outside of the United States, we have foreign exchange exposure to non-U.S. dollar revenues. However, we do not believe that foreign currency fluctuations materially affect our results of operations but may in the future if we expand our international sales. For the year ended September 30, 2014 our foreign currency transaction gain/loss was de minimis.

## ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

See pages F-1 through F-27 following the Exhibits List.

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

Not applicable.

## ITEM 9A. CONTROLS AND PROCEDURES.

### Management Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Our internal control over financial reporting was designed to provide reasonable assurance to the Company's management and board of directors regarding the preparation and fair presentation of published consolidated financial statements. Internal control over financial reporting is promulgated under the Exchange Act as a process designed by, or under the supervision of, the Company's principal executive and principal financial officers and effected by the Company's 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 purposes in accordance with generally accepted accounting principles. Internal control over financial reporting, no matter how well designed, has inherent limitations and may not prevent or detect misstatements. Therefore, even effective internal control over financial reporting can only provide reasonable assurance with respect to the financial statement preparation and presentation.

Our management has conducted, with the participation of our CEO and CFO, an assessment, including testing of the effectiveness, of our internal control over financial reporting as of September 30, 2014. Management's assessment of internal control over financial reporting was based on assessment criteria established in the *1992 Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on such evaluation, management concluded that our internal control over financial reporting was effective as of September 30, 2014.

### *Remediation of Previously Reported Material Weakness*

Our management developed and implemented a remediation action plan that fully remediated our previously reported material weakness. The principal elements of our remediation plan included the following:

- a. Our CEO appointed a Sarbanes-Oxley project leadership team, consisting of our CFO and our Controller, that oversaw the project,
- b. Together with a consultant that we have engaged, we have enhanced our review procedures and the documentation thereof, and,
- c. We implemented these enhanced procedures during our fiscal year ended September 30, 2014.

Further, we have amended our Form 10-K for the year ended September 30, 2013 to include a 404(b) attestation opinion from our auditors.

### Attestation Report of the Independent Registered Public Accounting Firm

The effectiveness of our internal control over financial reporting as of September 30, 2014 has been audited by Marcum LLP, our independent registered public accounting firm, who also audited our consolidated financial statements as of and for the year end September 30, 2014 included in this Annual Report on Form 10-K.

### Changes in Internal Control over Financial Reporting

There were no additional changes, other than those detailed above under Remediation of Material Weakness in our internal control over financial reporting during the most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM ON INTERNAL CONTROL OVER FINANCIAL REPORTING

To the Audit Committee of the  
Board of Directors and Shareholders of  
Applied DNA Sciences, Inc.

We have audited Applied DNA Sciences, Inc.'s (the "Company") internal control over financial reporting as of September 30, 2014, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in 1992. The Company's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying "Management Annual Report on Internal Control over Financial Reporting". Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

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

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

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

In our opinion, Applied DNA Sciences, Inc. maintained, in all material aspects, effective internal control over financial reporting as of September 30, 2014, based on criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in 1992.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets as of September 30, 2014 and the related consolidated statements of operations, stockholders' equity, and cash flows for the year then ended of the Company and our report dated December 15, 2014 expressed an unqualified opinion on those financial statements.

/s/ Marcum llp

Marcum llp  
Melville, NY  
December 15, 2014

**ITEM 9B. OTHER INFORMATION.**

Not applicable.

### PART III

#### ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The following is a list of our directors, executive officers and significant employees.

Name	Age	Title	Board of Directors
James A. Hayward	61	Chief Executive Officer, President, and Chairman of the Board	Director
John Bitzer, III	53		Director
Charles S. Ryan	50		Director
Yacov A. Shamash	65		Director
Sanford R. Simon	72		Director
Joseph D. Ceccoli	51		Director
Karol K. Gray	61	Chief Financial Officer	
Judith Murrah	56	Chief Information Officer	
Ming-Hwa Benjamin Liang	51	Secretary and Strategic Technology Development Officer	

Directors are elected to serve until the next annual meeting of stockholders and until their successors are elected and qualified. There are no family relationships between any director, executive officer, or person nominated or chosen by the registrant to become a director or executive officer.

#### ***Chief Executive Officer, President, and Chairman of the Board — James A. Hayward***

Dr. James A. Hayward has been our Chief Executive Officer since March 17, 2006 and our President and the Chairman of the Board of Directors since June 12, 2007. He was previously our acting Chief Executive Officer since October 5, 2005. He also served as Acting Chief Financial Officer from August 20, 2013 through October 13, 2013. Dr. Hayward received his Ph.D. in Molecular Biology from the State University of New York at Stony Brook in 1983 and an honorary Doctor of Science from the same institution in 2000. His experience with public companies began with the co-founding of one of England's first biotechnology companies — Biocompatibles. Following this, Dr. Hayward was Head of Product Development for the Estee Lauder companies for five years. In 1990 he founded The Collaborative Group, a provider of products and services to the biotechnology, pharmaceutical and consumer-product industries based in Stony Brook, where he served as Chairman, President and Chief Executive Officer for 14 years. During this period, The Collaborative Group created several businesses, including The Collaborative BioAlliance, a contract developer and manufacturer of human gene products, that was sold to Dow Chemical in 2002, and Collaborative Labs, a service provider and manufacturer of ingredients for skincare and dermatology that was sold to Engelhard (now BASF) in 2004.

Our Board believes that Dr. Hayward's current role as our Chief Executive Officer, the capital investments he has made to the Company throughout his tenure with us and his former senior executive positions in our industry make him an important contributor to our Board. Dr. Hayward also serves on the Board of Directors for the LI Angel Network, Regents Council, Softheon Corporation and Ward Melville Heritage Organization.

#### ***Director — John Bitzer, III***

John Bitzer, III, joined the Board of Directors on August 10, 2011. Mr. Bitzer is President and Chief Executive Officer of ABARTA, Inc., a private, third-generation family holding-company with operations in the soft drink beverages, newspaper publishing, oil and gas exploration and development, and ethnic and frozen food industries ("ABARTA"). In 1985, Mr. Bitzer began his career in sales for the Cleveland Coca-Cola Bottling Company. He has been Publisher of Atlantic City Magazine in Atlantic City, N.J. In 1994 he founded the ABARTA Media Group and held the position of Group Publisher. In 1997 he was named President and Chief Operating Officer of ABARTA and has been President and Chief Executive Officer since 1999. Mr. Bitzer has a degree from the University of Southern California and an MBA from the University of Michigan.

Our Board believes that Mr. Bitzer's professional and management experience in investing in and building growing enterprises make him an important contributor to the Board.

#### ***Director — Charles S. Ryan***

Dr. Charles S. Ryan joined the Board of Directors on August 2011. Dr. Ryan is the Sr. Vice President, and Chief Intellectual Property Counsel at Forest Laboratories ("Forest"), where he has been employed since 2003. Forest, a wholly-owned subsidiary of Actavis, with a market capitalization of nearly \$60 billion, develops and markets pharmaceutical products in a variety of therapeutic categories including central nervous system, cardiovascular, anti-infective, respiratory, gastrointestinal, and pain management medicine. Dr. Ryan has over 20 years experience in managing all aspects of intellectual property litigation, conducting due diligence investigations and prosecuting patent and trademark applications in the pharmaceutical and biotechnology industries. Dr. Ryan earned a doctorate in oral biology and pathology from Stony Brook University and a law degree from Western New England University.



Our Board believes that Mr. Ryan's expertise as chief intellectual property counsel at a global company make him an important contributor to the Board

***Director — Yacov A. Shamash***

Dr. Yacov A. Shamash has been a member of the Board of Directors since March 17, 2006. Dr. Shamash is Vice President of Economic Development at the State University of New York at Stony Brook. Since 1992, he has been the Dean of Engineering and Applied Sciences and the Harriman School for Management and Policy at the University, and Founder of the New York State Center for Excellence in Wireless Technologies at the University. Dr. Shamash developed and directed the NSF Industry/University Cooperative Research Center for the Design of Analog/Digital Integrated Circuits from 1989 to 1992 and also served as Chairman of the Electrical and Computer Engineering Department at Washington State University from 1985 until 1992. Dr. Shamash also serves on the Board of Directors of Keytronic Corp.

As Vice President of Economic Development at the State University of New York at Stony Brook, Dr. Shamash daily encounters leaders of businesses large and small, regional and global in their reach and, as a member of our Board, has played an integral role in our business development by providing the highest-level introductions to customers, channels to market and to the media. Dr. Shamash also brings to our Board his valuable experience gained from serving as a director at other private and public companies.

Our Board believes that Dr. Shamash's professional and management experience, service on other companies' boards and education make him an important contributor to our Board.

***Director — Sanford R. Simon***

Dr. Sanford R. Simon has been a member of the Board of Directors since March 17, 2006. Dr. Simon has been a Professor of Biochemistry, Cell Biology and Pathology at Stony Brook since 1997. He joined the faculty at Stony Brook as an Assistant Professor in 1969 and was promoted to Associate Professor with tenure in 1975. Dr. Simon was a member of the Board of Directors of The Collaborative Group from 1995 to 2004. From 1967 to 1969 Dr. Simon was a Guest Investigator at Rockefeller University. Dr. Simon received a B.A. in Zoology and Chemistry from Columbia University in 1963, a Ph.D. in Biochemistry from Rockefeller University in 1967, and studied as a postdoctoral fellow with Nobel Prize winner Max Perutz in Cambridge, England. He maintains an active research laboratory studying aspects of cell invasion in cancer and inflammation and novel strategies of drug delivery; he also teaches undergraduate, graduate, medical, and dental students.

Dr. Simon is an expert at the use of large biomolecules in commercial media, and we have made use of his expertise in formulating DNA into commercial carriers for specific customers. As a member of our Board, Dr. Simon has advised us on patents, provided technical advice, and introduced us to corporate partners and customers.

Our Board believes that Dr. Simon's professional experience, expertise, and education make him an important contributor to our Board.

***Director — Joseph D. Ceccoli***

Joseph D. Ceccoli was appointed to the board of directors on December 3, 2014. Since 2010, Mr. Ceccoli has been the Founder, President and CEO of Biocogent, LLC, a bioscience company located at the Stony Brook Long Island High Technology Incubator. Biocogent is focused on the invention, development and commercialization of skin-active molecules and treatment products used in regulated (OTC / Med-care), personal care and consumer products. Prior to starting Biocogent, Mr. Ceccoli was Global Director of Operations for BASF Corporation, a global Fortune 100 company and the world's largest global chemical company, where he was responsible for the integration, operations and growth of domestic and overseas business units from 2007 to 2008. Prior to BASF, Mr. Ceccoli was a General Manager for Engelhard Corporation, a US based fortune 500 company and chief operating officer of the Long Island based Collaborative Group from 2004 to 2007.

Mr. Ceccoli holds a Bachelor of Science Degree in Biotechnology from Rochester Institute of Technology and advanced professional training in various pharmaceutical sciences, emulsion chemistry, engineering and management disciplines. He is a member of numerous professional organizations such as the American Chemical Society and the Society of Cosmetic Chemists.

Our Board believes that Mr. Ceccoli's professional, operational and management experience make him an important contributor to our Board.

### ***Chief Financial Officer — Karol K. Gray***

Karol K. Gray has been our Chief Financial Officer since October 14, 2013. Previously she served on our Board of Directors from August 10, 2011 through August 20, 2013, and was chair of the Audit Committee and a member of the Compensation Committee.

During 2011 through 2013, she held the position of Vice Chancellor of Finance and Administration at UNC Chapel Hill. In addition she was the Executive Vice President/Treasurer of the Chapel Hill Foundation Real Estate Holdings, Inc., Treasurer of The University of North Carolina at Chapel Hill Investment Fund, Inc. (CHIF), Treasurer of The University of North Carolina at Chapel Hill Foundation, Inc., and Secretary/Treasurer of UNC Management Company, and a board member of the UNC Health Care System.

Prior to her position at UNC Chapel Hill, Ms. Gray was Vice President for Finance & Administration and the Chief Financial Officer at Stony Brook University. She was active on several committees, including the Brookhaven National Laboratory Audit Committee, the Presidential Budget Working Group, and the Investment Subcommittee of the Research Foundation of the State University of New York, and a member of the Executive Committee of the State University of New York Business and Officers Association.

Ms. Gray is a graduate of Hofstra University. Ms. Gray has 35 years of financial, organizational and management experience.

### ***Chief Information Officer — Judith Murrah***

Judith Murrah has been our Chief Information Officer since June 1, 2013. Ms. Murrah is responsible for information technology strategy and implementation. Ms. Murrah joined us from Motorola Solutions, which had acquired her former firm, Symbol Technologies. She was Senior Director of Information Technology, overseeing global IT program management office, financial and supplier operations and quality assurance. At Symbol, Ms. Murrah held leadership positions in product line management, global account sales, corporate and marketing communications and IT. Ms. Murrah holds a Master of Business Administration (MBA) from Harvard Business School, and a Bachelor of Science (BS) in Industrial Engineering from the University of Rhode Island. She is an author on eleven U.S. patents and one additional pending. Ms. Murrah is co-founder and President of non-profit ConnectToTech, a recognized leader in engaging students in science, technology, engineering and math disciplines. Ms. Murrah was named to 2005 and 2006 Top 50 Women of Long Island and received the inaugural 2001 Diamond Award for Long Island Women Leaders in Technology.

### ***Secretary and Strategic Technology Development Officer — Ming-Hwa Benjamin Liang***

Ming-Hwa Benjamin Liang has been our Secretary and Strategic Technology Development Officer since October 2005. Between May 1999 and September 2005, Mr. Liang had been the director of research and development at Biowell Technology Inc. Mr. Liang received a B.S. in Bio-Agriculture from Colorado State University in 1989, a M.S. in Horticulture from the University of Missouri at Columbia in 1991, his Ph.D. in Plant Science from the University of Missouri at Columbia in 1997 and his LL.M. in Intellectual Property Law from Shih Hsin University, Taiwan in 2004.

### **Board Leadership Structure**

Our Board of Directors does not have a policy on whether the same person should serve as both the Chief Executive Officer and Chairman of the Board or, if the roles are separate, whether the Chairman should be selected from the non-employee directors or should be an employee. The Board of Directors believes that Dr. Hayward's dual role as both Chairman of the Board and Chief Executive Officer serves the best interests of both the company and its stockholders. His combined role enables decisive leadership, ensures clear accountability, and enhances the Company's ability to communicate its message and strategy clearly and consistently to the company's stockholders, employees, customers and suppliers. Dr. Hayward possesses detailed and in-depth knowledge of the issues, opportunities and challenges facing us and our businesses and is thus best positioned to develop agendas that ensure that the time and attention of the Board of Directors are focused on the most critical matters. This structure also enables our Chief Executive Officer to act as a bridge between management and the Board of Directors, helping both to act with a common purpose.










The Board of Directors appreciates that the advantages gained by having a single Chairman and Chief Executive Officer must be viewed in light of potential independence concerns. The Board considers, however, that we have adequate safeguards in place to address those concerns, including, for example, our Board of Directors consisting of a supermajority of independent directors. In addition, our audit, compensation and nominating committees, which oversee critical matters such as the integrity of our financial statements, the compensation of executive management, the selection and evaluation of directors, and the development and implementation of corporate governance policies, each consist entirely of independent directors.



Our risk management program is overseen by our Chief Executive Officer. Material risks are identified and prioritized by management, and each prioritized risk is referred to a Board Committee or the full Board of Directors for oversight. For example, strategic risks are referred to the full Board while financial risks are referred to the Audit Committee. The Board of Directors regularly reviews information regarding our liquidity and operations, as well as the risks associated with each. Also, the Compensation Committee periodically reviews the most important risks to our business to ensure that compensation programs do not encourage excessive risk-taking and promote our goals and objectives.

## Board of Directors Structure and Committee Composition

In June 2008, our Board of Directors established a standing compensation committee and in September 2011, our Board of Directors established an audit committee and a nominating committee. Each of the committees operates under a written charter adopted by the Board of Directors. All of the committee charters are available on our web site at <http://www.adnas.com/investors> or by writing to Applied DNA Sciences, Inc., 50 Health Sciences Drive, Stony Brook, New York 11790, c/o Investor Relations.

The membership of each of the audit committee, the compensation committee, and the nominating committee is composed entirely of independent directors. In addition, the members of the audit committee meet the heightened standards of independence for audit committee members required by SEC rules and NASDAQ rules. The committee membership and the responsibilities of each of the committees are described below.

Name	Audit	Compensation	Nominating
James A. Hayward	—	—	—
John Bitzer, III <sup>(I)</sup>			
Joseph D. Ceccoli <sup>(I)</sup>	—	—	—
Charles S. Ryan <sup>(I)</sup>			—
Sanford R. Simon <sup>(I)</sup>	—	—	
Yacov A. Shamash <sup>(I)</sup>			

-  Chairperson
-  Member
- (I) Independent director

### Audit Committee

Messrs. Bitzer (Chairperson), Ryan and Shamash currently serve on the audit committee. On August 20, 2013 in connection with her appointment as Chief Financial Officer, effective October 14, 2013 Karol Gray resigned from the audit committee, of which she was the chair and John Bitzer assumed the chair position. The Board of Directors has determined that each member of the audit committee is independent within the meaning of the director independence standards of the company and NASDAQ as well as the heightened director independence standards of the SEC for audit committee members, including Rule 10A-3(b)(1) under the Exchange Act. The Board of Directors has also determined that each of the members of the audit committee is financially sophisticated and is able to read and understand consolidated financial statements and that Mr. Bitzer is an "audit committee financial expert" as defined in the Exchange Act.

The composition and responsibilities of the audit committee and the attributes of its members, as reflected in the charter, are intended to be in accordance with applicable requirements for corporate audit committees. The audit committee charter will be reviewed, and amended if necessary, on an annual basis.

The audit committee assists the Board of Directors in fulfilling its oversight responsibility relating to our financial statements and the disclosure and financial reporting process, our system of internal controls, our internal audit function, the qualifications, independence and performance of our independent registered public accounting firm, compliance with our code of ethics and legal and regulatory requirements. The audit committee has the sole authority to appoint, retain, terminate, compensate and oversee the work of the independent registered public accounting firm, as well as to pre-approve all audit and non-audit services to be provided by the independent registered public accounting firm.

### Compensation Committee

Our compensation committee is composed of John Bitzer, III, Yacov A. Shamash (Chairperson) and Charles S. Ryan. Ms. Gray resigned as a member of the Compensation Committee on August 20, 2013 in connection with her appointment as Chief Financial Officer effective October 14, 2013. The compensation committee reviews and approves salaries and bonuses for all officers, administers options outstanding under our stock incentive plan, provides advice and recommendations to the Board regarding directors' compensation and carries out the responsibilities required by SEC rules. The compensation committee believes that its processes and oversight should be directed toward attracting, retaining and motivating employees and non-employee directors to promote and advance our interests and strategic goals. As requested by the compensation committee, the Chief Executive Officer will provide information and may participate in discussion regarding compensation for other executive officers. The compensation committee does not utilize outside compensation consultants but considers other general industry information and trends if available.

### ***Nominating Committee***

Messrs. Shamash (Chairperson), Bitzer and Simon currently serve on the nominating committee. The Board of Directors has determined that each member of the nominating committee is independent within the meaning of the director independence standards of the company, NASDAQ and the SEC.

The nominating committee is responsible for, among other things: reviewing Board composition, procedures and committees, and making recommendations on these matters to the Board of Directors; and reviewing, soliciting and making recommendations to the Board of Directors and stockholders with respect to candidates for election to the Board.

### ***Compensation Committee Interlocks and Insider Participation***

None of the prospective members of our compensation committee is or has been an officer or employee of our company. None of our executive officers currently serves, or in the past year has served, as a member of the compensation committee or director (or other board committee performing equivalent functions or, in the absence of any such committee, the entire Board of Directors) of any entity that has one or more executive officers who will serve on our compensation committee or our Board of Directors.

### ***Process for Identifying and Evaluating Nominees for the Board of Directors***

***Director Qualifications.*** The nominating committee has not formally established any specific, minimum qualifications that must be met by each candidate for the Board of Directors or specific qualities or skills that are necessary for one or more of the members of the Board of Directors to possess.

***Identifying Nominees.*** The nominating committee has two primary methods for identifying director candidates (other than those proposed by our stockholders, as discussed below). First, on a periodic basis, the nominating committee will solicit ideas for possible candidates from a number of sources, including members of the Board of Directors, our executive officers and individuals personally known to the members of the Board of Directors. Second, the nominating committee is authorized to use its authority under its charter to retain at the company's expense one or more search firms to identify candidates (and to approve such firms' fees and other retention terms).

***Stockholder Candidates.*** The nominating committee will consider candidates for nomination as a director submitted by stockholders. Although the nominating committee does not have a separate policy that addresses the consideration of director candidates recommended by stockholders, the Board of Directors does not believe that such a separate policy is necessary because our bylaws permit stockholders to nominate candidates and one of the duties set forth in the nominating committee charter is to consider director candidates submitted by stockholders in accordance with our bylaws. The nominating committee will evaluate individuals recommended by stockholders for nomination as directors according to the criteria discussed above and in accordance with our bylaws and the procedures described under "Stockholder Proposals and Nominations" below.

***Review of Director Nominees.*** The nominating committee will evaluate any candidates recommended by stockholders against the same criteria and pursuant to the same policies and procedures applicable to the evaluation of candidates proposed by our directors, executive officers, third-party search firms or other sources. In evaluating proposed director candidates, the nominating committee may consider, in addition to any minimum qualifications and other criteria for Board of Directors membership approved by the Board of Directors from time to time, all facts and circumstances that it deems appropriate or advisable, including, among other things, the proposed director candidate's understanding of the company's business and industry on a technical level, his or her judgment and skills, his or her depth and breadth of professional experience or other background characteristics, his or her independence, his or her willingness to devote the time and effort necessary to be an effective board member, and the needs of the Board of Directors. We do not have a formal policy with regard to the consideration of diversity in identifying director nominees. However, the Board of Directors believes that it is essential that its members represent diverse viewpoints, with a broad array of experiences, professions, skills, geographic representation and backgrounds that, when considered as a group, provide a sufficient mix of perspectives to allow the Board of Directors to best fulfill its responsibilities to the long-term interests of our stockholders. The nominating committee considers at least annually, and recommends to the Board of Directors suggested changes to, if any, the size, composition, organization and governance of the Board of Directors and its committees.

***Stockholder Proposals and Nominations.*** In order for a stockholder to nominate a person for election as a director at the 2015 annual meeting of stockholders, you must provide written notice to Applied DNA Sciences, Inc., 50 Health Sciences Drive, Stony Brook, New York 11790, c/o Corporate Secretary. The Corporate Secretary must receive this notice within the time period specified in the proxy statement for the 2014 annual meeting of stockholders. The notice of a proposed director nomination must provide information and documentation as required in our bylaws which, in general, require that the notice of a director nomination include the information about the nominee that would be required to be disclosed in the solicitation of proxies for the election of a director under federal securities laws; the nominee's written consent to be named in the proxy statement as a nominee and to serve as a director if elected; a description of any transaction or arrangement during the last three years between the stockholder making the nomination and the nominee in which the nominee had a direct or indirect material interest; and a completed and signed questionnaire, representation and agreement. A copy of the bylaw requirements will be provided upon request to the Corporate Secretary at the address above.

## Stockholder Communications with the Board

Stockholders and other interested parties may make their concerns known confidentially to the Board of Directors or the independent directors by submitting a communication in an envelope addressed to the "Board of Directors," a specifically named independent director or the "Independent Directors" as a group, in care of the Secretary. All such communications will be conveyed, as applicable, to the full Board of Directors, the specified independent director or the independent directors as a group.

## Code of Ethics

Our Board of Directors adopted a "code of ethics" as defined by regulations promulgated under the Securities Act and the Exchange Act that applies to all of our employees, officers and directors, including those officers responsible for financial reporting. The code of ethics is designed to codify the ethical standards that we believe are reasonably designed to deter wrong-doing.

We have established procedures to ensure that suspected violations of the code may be reported anonymously. A current copy of our code of ethics is available on our website at <http://www.adnas.com/investors>. A copy may also be obtained, free of charge, from us upon a request directed to Applied DNA Sciences, Inc., 50 Health Sciences Drive, Stony Brook, New York 11790, c/o Investor Relations. We intend to disclose any amendments to or waivers of a provision of the code of ethics granted to directors and officers by posting such information on our website available at [www.adnas.com](http://www.adnas.com) and/or in our public filings with the SEC.

## Section 16(a) Beneficial Ownership Reporting Compliance

Since we did not register our common stock under Section 12 of the Exchange Act until November 13, 2014 in connection with the listing of our common stock and warrants on The NASDAQ Stock Market LLC, we were not required to file reports of executive officers and directors and persons who own more than 10% of a registered class of the Company's equity securities pursuant to Section 16(a) of the Exchange Act during our fiscal year ending September 30, 2014.

## ITEM 11. EXECUTIVE COMPENSATION.

### Compensation Discussion & Analysis

Our compensation approach is necessarily tied to our stage of development as a company. We are principally devoted to developing DNA embedded biotechnology security solutions and to date, have had a limited operating history. As a company with a limited operating history, we have necessarily limited the establishment of extensive administrative and operating infrastructure, and a formal executive compensation policy has not been established. We have a compensation committee of the Board of Directors that is responsible for all compensation matters of our Chief Executive Officer. Historically, the compensation of all our other named executive officers was approved by our Board of Directors upon the recommendation of our compensation committee, which in turn relied upon the recommendation of our Chief Executive Officer. As discussed below, the recommendation of our Chief Executive Officer was largely discretionary, based on his subjective assessment of the particular executive. As we continue to grow, we expect that the specific direction, emphasis and components of our executive compensation program will continue to evolve. The compensation committee has overall responsibility for approving and evaluating our executive officers' compensation plans, policies and programs. Our compensation program is designed to employ best practices in executive compensation and consider all relevant regulatory guidance regarding sound incentive compensation policies. The remainder of this section provides a general summary of our compensation policies and procedures.

### Our Executive Compensation Philosophy and Objectives

#### General

The fundamental purpose of our executive compensation program is to assist us in achieving our financial and operating performance objectives. Specifically, we attempt to tailor an executive's compensation to (1) retain and motivate the executive, (2) reward him or her upon the achievement of company-wide, and individual performance, and (3) align the executive's interest with the creation of long-term stockholder value, without encouraging excessive risk taking. To that end, and within the context of the stage of our company, we have compensated our named executive officers through a mix of base salary, equity-based incentives, and cash bonuses.

Our business model is based on our ability to establish long-term relationships with clients and to maintain our strong mission, client focus, entrepreneurial spirit and team orientation. We have sought to create an executive compensation package that balances short-term versus long-term components when considering cash bonuses and employee options, in ways we believe are most appropriate to motivate senior management and reward them for achieving the following goals:

- Develop a culture that embodies a commitment for our business, creative contribution and a drive to achieve established goals and performance objectives;
- Provide leadership to the organization in such a way as to maximize the results of our business operations;
- Lead us by demonstrating forward thinking in the operation, development and expansion of our business;

- Effectively manage organizational resources to derive the greatest value possible from each dollar invested; and
- Take strategic advantage of the market opportunity to expand and grow our business and revenues.

We believe that having a compensation program designed to align executive officers to meet our business objectives and to reinforce excellent performance and accountability is the cornerstone to successfully implement and achieve our strategic plan. In determining the compensation of our executive officers, we are guided by the following key principles:

- *Competition.* Compensation should reflect the competitive marketplace, so we can retain, attract and motivate talented executives.
- *Accountability for Business Performance.* Compensation should be tied to financial performance, so that executives are held accountable through their compensation for contributions to the performance of our company as a whole as well as their performance of the business unit for which they are responsible.
- *Accountability for Individual Performance.* Compensation should be tied to the individual's performance to encourage and reflect individual contributions to our company's performance. We consider individual performance as well as performance of the businesses and responsibility areas that an individual oversees, and weigh these factors as appropriate in assessing a particular individual's performance.
- *Alignment with Stockholder Interests.* Compensation should be tied to our financial performance through equity awards to align executives' interests with those of our stockholders.

Our executive compensation structure not only aims to be competitive in our industry, but also to be fair relative to compensation paid to other professionals within our organization, relative to our short-term and long-term performance and relative to the value we deliver to our stockholders. We seek to maintain a performance-oriented culture and a compensation approach that rewards our executive officers when we achieve our goals and objectives, while putting at risk an appropriate portion of their compensation against the possibility that our goals and objectives may not be achieved.

The Chief Executive Officer is the only named executive officer with an employment agreement. In addition, there is no change in control, severance or noncompetition agreements with any named executive officer, nor are we otherwise obligated to pay any named executive officers any amounts if there is a change in control of the Company or if such executive's employment with us terminates, except for the Chief Executive Officer.

#### **Determination of Executive Compensation Awards**

The compensation committee establishes and monitors the basic philosophy governing the compensation of the Chief Executive Officer. On an annual basis, the compensation committee reviews and makes recommendations to the Board with respect to the compensation of the Chief Executive Officer including incentive compensation plans and equity-based plans. Historically, compensation decisions for all other of our executive officers were approved by our Board of Directors upon the recommendation of our compensation committee, which in turn relied upon the recommendation of our Chief Executive Officer. We have traditionally placed significant emphasis on the recommendation of our Chief Executive Officer with respect to the determination of executive compensation (other than his own), in particular with respect to the determination of base salary, cash incentive and equity incentive awards, and typically followed such recommendations as presented by our Chief Executive Officer. As we continue to grow, we will make the transition to have our compensation committee be solely responsible for administering our executive compensation program, although we expect to continue to rely, in part, upon the advice and recommendations of our Chief Executive Officer, particularly with respect to those executive officers that report directly to him. The compensation committee's composition and oversight of our executive compensation program is described in more detail below in the section entitled "Compensation Committee."

For purposes of determining our executive officer compensation in fiscal 2014 and in prior fiscal years, we considered the following factors: our understanding of the amount of compensation generally paid by similarly situated companies to their executives with similar roles and responsibilities; the roles and responsibilities of our executives; the individual experience and skills of, and expected contributions from, our executives; the amounts of compensation being paid to our other executives; our executives' historical compensation at our company; an assessment of the professional effectiveness and capabilities of the executive officer; and the performance of the executive officer against the corporate and other scorecards used to determine incentive compensation. While we have not used any formula to determine compensation based on these factors, we have placed the most emphasis in determining compensation on our understanding of the amount of compensation generally paid by similarly situated companies to their executives with similar roles and responsibilities and the subjective assessment of the professional effectiveness and capabilities of the executive officer. Our understanding of the amount of compensation generally paid by similarly situated companies was based on our compensation committee's and our Chief Executive Officer's own business judgment and collective experience in such matters.

### ***Base Salary***

Our Board of Directors sets the Chief Executive Officer's base salary annually, based on the recommendation of the compensation committee. The base salary for each of the other named executive officers is reviewed annually by the Chief Executive Officer and any adjustments are communicated and approved by the Compensation Committee. Adjustments to base salary are based upon a review of a variety of factors, including the following:

- individual and Company performance, measured against quantitative and qualitative goals, such as our growth, revenue, profitability and other matters;
- duties and responsibilities as well as the executive's experience; and
- the types and amount of each element of compensation to be paid to the named executive officer.

### ***Cash bonuses***

The Chief Executive Officer is paid cash bonuses based on the discretion of the Compensation Committee and approval by the Board of Directors. We pay discretionary cash bonuses to our other named executive officers, which are recommended by the Chief Executive Officer. The cash bonuses, if any, are determined after the end of each fiscal year and may be paid annually, are intended to recognize and reward those named executive officers who have contributed meaningfully to our performance for the prior year. Both personal and the Company's performance are factors that the Board and Chief Executive Officer typically consider in deciding whether to award a cash bonus to a named executive officer and the amount of such bonus.

### ***Long-term Stock-Based Compensation***

Our long-term compensation program has historically consisted solely of stock options. Option grants made to executive officers are designed to provide them with incentive to execute their responsibilities in such a way as to generate long-term benefit to us and our stockholders. Through possession of stock options, our executives participate in the long-term results of their efforts, whether by appreciation of our Company's value or the impact of business setbacks, either company-specific or industry-based. Additionally, stock options provide a means of ensuring the retention of our executive officers, in that they are in almost all cases subject to vesting over an extended period of time.

Stock options provide executives with a significant and long-term interest in our success. By only rewarding the creation of stockholder value, we believe stock options provide our executive officers with an effective risk and reward profile. Although it is our current practice to use stock options as our sole form of long-term incentive compensation, the compensation committee reviews this practice on an annual basis in light of our overall business strategy, existing market-competitive best practices and other factors.

Stock options are granted periodically and are subject to vesting based on the executive's continued employment. Historically we have granted our executive officers a combination of incentive stock options that vest over a period of time or stock options that are immediately exercisable. Most options vest evenly over four years, beginning on the date of the grant.

Stock options are granted to our executive officers in amounts determined by the Compensation Committee in its discretion. Stock grants have not been formula-based, but instead have historically been granted taking into account a mixture of the following qualitative factors: the executive's level of responsibility; the competitive market for the executive's position; the executive's potential contribution to our growth; and the subjective assessment of the professional effectiveness and capabilities of these executives.

### ***Benefits***

We provide the following benefits to our executive officers on the same basis as the benefits provided to all employees:

- health and dental insurance;
- life insurance;
- short-and long-term disability; and
- 401(k) Plan (currently there is no employer matching)

These benefits are consistent with those offered by other companies and specifically with those companies with which we compete for employees.

### ***Summary Compensation Table***

The following table sets forth the compensation of our principal executive officer, our principal financial officer and our other executive officers for the fiscal years ended September 30, 2014, 2013 and 2012. We refer to these executive officers as our "named executive officers."

	<b>Year</b>	<b>Salary (\$)(c)</b>	<b>Bonus (\$)(d)</b>	<b>Stock Awards (\$)(e)</b>	<b>Option Awards (\$)(f)(1)</b>	<b>Non-Equity Incentive Plan Compensation (\$)(g)</b>	<b>Change in Pension Value and Nonqualified Deferred Compensation Earnings (\$)(h)</b>	<b>All Other Compensation (\$)(i)</b>	<b>Total (\$)(j)</b>
James A. Hayward	2014	343,269	—	—	3,530,437	—	—	—	3,873,706
<i>Chairman, President and CEO</i>	2013	319,974	150,000	—	—	—	—	—	469,974
	2012	242,334	—	—	—	—	—	—	242,334
Karol K. Gray	2014	310,962	—	—	207,043	—	—	—	518,005
<i>CFO</i>	2013	—	—	—	—	—	—	—	—
	2012	—	—	—	—	—	—	—	—
Judith Murrah	2014	250,000	—	—	195,691	—	—	—	445,691
<i>CIO(3)</i>	2013	81,731	—	—	—	—	—	—	81,731
	2012	—	—	—	—	—	—	—	—
Ming-Hwa Liang	2014	140,000	2,000	—	211,826	—	—	—	353,826
<i>CTO and Secretary</i>	2013	140,000	10,000	—	—	—	—	—	150,000
	2012	140,000	—	—	—	—	—	—	140,000

(1) The amounts in column (f) represent the grant date fair value under ASC 718 based on the Black Scholes value of the options on the grant date.

(2) Ms. Gray was appointed as Chief Financial Officer effective October 14, 2013.

(3) Ms. Judith Murrah has been our Chief Information Officer since June 1, 2013. Ms. Murrah's annual salary is \$250,000 and she received 33,333 options upon completing six months of employment in December 2013.

#### Grants of Plan-Based Awards

The following table provides information regarding grants of plan-based awards to our named executive officers during the year ended September 30, 2014:

<b>Name</b>	<b>Grant Date</b>	<b>All Other Stock Awards: Number of Shares of Stock or Units(1) (#)</b>	<b>All Other Option Awards: Number of Securities Underlying Options (#)</b>	<b>Exercise or Base Price of Option Awards (\$/Sh)</b>	<b>Grant Date Fair Value of Stock and Option Awards(3) (\$)</b>
James A. Hayward	10/17/2013(1)	—	833,334	\$ 5.82	3,530,437
Karol K. Gray	12/10/2013(2)	—	8,334	\$ 8.16	49,640
	4/14/2014(1)	—	33,334	\$ 6.60	157,403
Judith Murrah	12/02/2013(1)	—	33,334	\$ 7.02	170,871
	12/10/2013(2)	—	4,167	\$ 8.16	24,820
Ming-Hwa Liang	10/17/2013(1)	—	50,000	\$ 5.82	211,826

(1) Options are exercisable for five years with vesting at 25% each anniversary over four years from the date of grant.

(2) Options are exercisable for five years and vested immediately.

(3) These amounts represent the grant date fair value under ASC 718 based on the Black Scholes value of the options on the grant date.



## Outstanding Equity Awards at Fiscal Year-End

The following table shows information concerning outstanding equity awards as of September 30, 2014 held by the Named Executive Officers.

Name	Option Awards			
	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date
James A. Hayward	283,334 <sup>(1)</sup>	—	\$ 3.00	5/27/2015
	166,667 <sup>(2)</sup>	—	3.60	7/1/2015
	666,667 <sup>(3)</sup>	—	3.51	7/11/2018
	— <sup>(4)</sup>	833,334	5.82	10/16/2018
Karol K. Gray	15,900 <sup>(8)</sup>	—	4.08	11/29/2016
	6,175 <sup>(8)</sup>	—	10.79	11/29/2017
	11,112 <sup>(8)</sup>	—	5.82	10/16/2018
	8,334 <sup>(5)</sup>	—	8.16	12/09/2018
Judith Murrah	— <sup>(6)</sup>	33,334	6.60	04/13/2019
	— <sup>(7)</sup>	33,334	7.02	12/01/2018
	4,167 <sup>(5)</sup>	—	8.16	12/09/2018
Ming-Hwa Liang	116,667 <sup>(1)</sup>	—	3.00	5/27/2015
	166,667 <sup>(2)</sup>	—	3.60	7/1/2015
	— <sup>(4)</sup>	50,000	5.82	10/16/2018

- (1) On May 27, 2010, our named executive officers elected to forfeit certain stock options to purchase up to 483,333 shares of our common stock at an exercise price of \$6.60 that were previously granted to them under the 2005 Incentive Stock Plan. In lieu of the forfeited options, our Board of Directors granted new stock options to such named executive officers to purchase up to 483,333 shares of our common stock at an exercise price of \$3.00 under the 2005 Stock Incentive Plan which are fully vested and became exercisable on June 29, 2010 following approval by our stockholders to amend our certificate of incorporation to increase our authorized shares of common stock.
- (2) On July 1, 2010, our Board of Directors granted nonstatutory stock options under the 2005 Incentive Stock Plan to each of our named executive officers. The options granted to the named executive officers vested with respect to 25% of the underlying shares on the date of grant, and the remaining will vest ratably each anniversary thereafter until fully vested on the third anniversary of the date of grant.
- (3) On July 11, 2011, our Board of Directors granted nonstatutory stock options under the 2005 Incentive Stock Plan to Dr. James A. Hayward, our Chairman, President and Chief Executive Officer. The options granted to Dr. Hayward vested 25% on the grant date and shall vest 37.5% on each of the next two anniversaries of the grant date, subject to Dr. Hayward's continuous employment through the applicable vesting date, and if our revenues for any fiscal quarter beginning after the date hereof are at least \$1 million more than our revenues for the immediately preceding fiscal quarter, then vesting of the next 37.5% installment will accelerate (such that, if the \$1 million increase is met in at least two quarters before the second anniversary of the option grant date, all of the options will have become fully vested as of the end of the second quarter for which the \$1 million increase is met).
- (4) On October 17, 2013, we granted Dr. James A. Hayward, and Dr. Ming-Hwa Liang options to purchase 833,334 and 50,000 shares of our common stock, respectively, at an exercise price of \$5.82 per share for five years with vesting at 25% each anniversary for the next four years.
- (5) On December 10, 2013, we granted an aggregate of 35,433 options to purchase our common stock at an exercise price of \$8.16 per share for five years to employees, with immediate vesting. As part of this grant, Ms. Gray and Ms. Murrah were granted 8,334 and 4,167 options, respectively.
- (6) On April 14, 2014, we granted 33,334 options to purchase our common stock at an exercise price of \$6.60 per share for five years to Ms. Gray with vesting at 25% each anniversary for the next four years.
- (7) On December 2, 2013, we granted 33,334 options to purchase our common stock at an exercise price of \$7.02 per share for five years to Ms. Murrah with vesting at 25% each anniversary for the next four years.
- (8) These options were granted to Ms. Gray for her service on the Board of Directors prior to her appointment as the Chief Financial Officer.

## **Option Exercises and Stock Vested**

During fiscal 2014, none of our named executive officers exercised options or acquired shares upon vesting of stock awards.

## **Pension Benefits**

None of our named executive officers participates in or has account balances in qualified or non-qualified defined benefit plans sponsored by us.

## **Nonqualified Contribution Plans**

None of our named executive officers participates in or has account balances in non-qualified defined contribution plans maintained by us.

## **Deferred Compensation**

None of our named executive officers participates in or has account balances in deferred compensation plans or arrangements.

## **Employment Agreement with Dr. James A. Hayward**

We entered into an employment agreement dated July 11, 2011, with Dr. James A. Hayward, our Chairman, President and Chief Executive Officer. The agreement provides that Dr. Hayward will be our Chief Executive Officer, and will continue to serve on our Board of Directors. The initial term of his employment was from July 1, 2011 through June 30, 2014, which automatically renews for one-year periods subject to ninety days' prior notice of non-renewal by either party. Dr. Hayward's employment agreement was automatically renewed for a one-year period. Dr. Hayward received an initial annual salary of \$225,000, subject to annual review. On November 30, 2012, our Board of Directors increased Dr. Hayward's annual salary to \$350,000. The agreement provided that Dr. Hayward's annual salary will be increased to \$350,000 per annum after the first quarter in which our revenues exceed \$1 million for such quarter. The Board of Directors, acting in its discretion, may grant annual bonuses to Dr. Hayward. Dr. Hayward will be eligible for a special cash bonus of up to \$750,000, 40% of which will be payable if and when annual revenue reaches \$6 million and 10% of which would be payable for each \$2 million of annual revenue in excess of \$6 million. On November 30, 2012, the Board granted a cash bonus of \$150,000 to Dr. Hayward payable upon the closing of an additional financing of \$5.5 million by an investor. Dr. Hayward will be entitled to certain benefits and perquisites and will be eligible to participate in retirement, welfare and incentive plans available to our other employees.

On July 11, 2011, Dr. Hayward was granted options to purchase 666,667 shares of our common stock at an exercise price per share equal to \$3.51. The options vested as follows: 25% on the grant date, and 37.5% on each of the next two anniversaries of the grant date, subject to Dr. Hayward's continuous employment. If our revenues for any fiscal quarter increased by more than \$1 million over the prior fiscal quarter, then the vesting date for the next 37.5% tranche would be accelerated. We also granted 250,000 shares of our common stock to Dr. Hayward.

The agreement with Dr. Hayward also provides that if he is terminated before the end of the initial or a renewal term by us without cause or if Dr. Hayward terminates his employment for good reason, then, in addition to previously earned and unpaid salary, bonus and benefits, and subject to the delivery of a general release and continuing compliance with restrictive covenants, Dr. Hayward will be entitled to receive a pro rata portion of the annual bonus he would have received if employment had continued through the end of the year of termination; salary continuation payments for two years following termination equal to the greater of (i) three times base salary or (ii) two times base salary plus bonus; company-paid COBRA continuation coverage; continuing life insurance benefits (if any) for two years; and extended exercisability of outstanding vested options (for three years from termination date or, if earlier, the expiration of the fixed option term). If termination of employment as described above occurs within six months before or two years after a change in control of the company, then, in addition to the above payments and benefits, all of Dr. Hayward's outstanding options and other equity incentive awards will become fully vested and Dr. Hayward will receive a lump sum payment of the amounts that would otherwise be paid as salary continuation. In general, a change in control will include a 30% or more change in ownership of the company.

Upon termination due to death or disability, Dr. Hayward will generally be entitled to receive the same payments and benefits he would have received if his employment had been terminated by the Company without cause (as described in the preceding paragraph), other than salary continuation payments.

Effective June 21, 2014, Dr. Hayward's annual salary was voluntarily reduced by \$50,000. This salary reduction will be accrued and repaid when the Company reaches \$3,000,000 in sales for two consecutive quarters or the Company has net income at the end of any fiscal year.

## Potential Payments upon Termination of Employment or a Change of Control

There is a change-in-control provision included in Dr. Hayward's employment agreement, and we are obligated to pay severance or other enhanced benefits to him upon termination of his employment. For additional information, see "Employment Agreement" above.

Dr. Hayward would have been entitled to an estimated payment of \$900,000 (three times his annual base salary) if his employment was terminated on September 30, 2014 by us without "cause" or by Dr. Hayward for "good reason" and extended exercisability of outstanding vested options (for three years from termination date or, if earlier, the expiration of the fixed option term).

In the context of a "change in control" of the company had it occurred on September 30, 2014, and within six months before or two years after such change in control Dr. Hayward's employment was terminated by us without "cause" or by Dr. Hayward for "good reason", he would have been entitled to an estimated payment and benefits of \$900,000 (three times his annual base salary). In addition to the above payments and benefits, all of Dr. Hayward's outstanding options and other equity incentive awards would have become fully vested and Dr. Hayward would have received a lump sum payment of the amounts that would otherwise be paid as salary continuation.

## Director Compensation Fiscal 2014

During the fiscal year ended September 30, 2014, we did not provide any cash compensation to our non-employee directors for their service on our Board of Directors. On November 30, 2011, the Board approved the recommendation from the Compensation Committee that each of the non-employee directors shall annually receive, for as long as they are a member of the Board, a 5-year stock option, fully vested after one year, to purchase a number of shares of common stock having a fair value of \$60,000 as determined using the Black Scholes value, or as determined by the Compensation Committee. Additionally, the Board approved the recommendation from the Compensation Committee and Dr. James Hayward that stock options to purchase shares of our common stock having an aggregate fair value of \$40,000 using the Black Scholes value be granted to certain non-employee directors.

	Fees Earned or Paid in Cash (\$)	Stock Awards (\$)	Option Awards (\$)(1)(2)	All Other Compensation (\$)	Total (\$)(1)(5)
<i>Sanford R. Simon</i>	—	—	40,000	—	40,000
<i>Yacov A. Shamash<sup>(2)</sup></i>	—	—	53,350	—	53,350
<i>John Bitzer, III<sup>(3)</sup></i>	—	—	45,000	—	45,000
<i>Karol K. Gray<sup>(4)</sup></i>	—	—	40,000	—	40,000
<i>Charles S. Ryan<sup>(3)</sup></i>	—	—	45,000	—	45,000

(1) A 5-year option to purchase 11,111 shares of our common stock was granted by the Board to each of the non-employee directors on October 17, 2013 at an exercise price of \$5.82 per share, vesting immediately.

(2) A 5-year option to purchase an additional 4,074 shares of our common stock at an exercise price of \$5.82 per share was granted to Mr. Shamash on October 17, 2013, vesting immediately.

(3) A 5-year option to purchase an additional 1,667 shares of our common stock at \$5.82 per share was granted to both Mr. Bitzer and Mr. Ryan on October 17, 2013, vesting immediately.

(4) Ms. Gray was awarded these options for her service on the Board through August 20, 2013. Ms. Gray resigned from the Board of Directors on August 20, 2013.

(5) At September 30, 2014, Mr. Simon, Mr. Shamash, Mr. Bitzer, Ms. Gray and Mr. Ryan had outstanding option awards (including warrants) aggregating 48,333, 59,756, 35,882, 42,977, and 35,882 shares of our common stock, respectively.

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

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The following table sets forth certain information regarding the shares of our common stock beneficially owned as of December 11, 2014, (i) by each person who is known to us to beneficially own more than 5% of the outstanding common stock, (ii) by each of the executive officers named in the table under "Executive Compensation" and by each of our directors, and (iii) by all officers and directors as a group.

Unless otherwise indicated below, each person or entity has an address in care of our principal executive offices at 50 Health Sciences Drive, Stony Brook, New York 11790.

Name and Address of Beneficial Owner	Title of Class	Number of Shares Owned <sup>(1)(2)</sup>	Percentage of Class <sup>(3)</sup>
<b>Executive Officers and Directors:</b>			
James A. Hayward	Common Stock	3,746,655 <sup>(4)</sup>	19.6%
Yacov A. Shamash	Common Stock	59,756 <sup>(5)</sup>	*
John Bitzer, III <sup>(11)</sup>	Common Stock	1,276,517 <sup>(6)(7)</sup>	7.3%
Joseph D. Ceccoli	Common Stock	0	*
Karol K. Gray	Common Stock	44,623 <sup>(6)(12)</sup>	*
Judith Murrah	Common Stock	15,412 <sup>(12)(13)</sup>	*
Charles S. Ryan	Common Stock	35,882 <sup>(6)</sup>	*
Ben Liang	Common Stock	301,583 <sup>(8)</sup>	1.7%
Sanford R. Simon	Common Stock	48,333 <sup>(9)</sup>	*
<b>All directors and officers as a group (9 persons)</b>	Common Stock	5,528,761 <sup>(10)</sup>	28.0%
<b>5% Stockholders:</b>			
Delabarta, Inc. <sup>(11)</sup>	Common Stock	1,213,235	7.0%

\* indicates less than one percent

(1) Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to the shares shown. Except as indicated by footnote and subject to community property laws where applicable, to our knowledge, the stockholders named in the table have sole voting and investment power with respect to all shares of common stock shown as beneficially owned by them. A person is deemed to be the beneficial owner of securities that can be acquired by such person within 60 days upon the exercise of options, warrants or convertible securities (in any case, the "Currently Exercisable Options").

(2) Does not include the remaining unvested shares subject to options granted on October 17, 2013 pursuant to the 2005 Incentive Stock Plan, which vest 25% of the underlying shares ratably on each anniversary thereafter until fully vested on the fourth anniversary of the date of grant, including 625,001 to James A. Hayward and 37,500 to Ben Liang. Does not include the remaining unvested shares subject to 25,001 options granted to Judith Murrah on December 2, 2013 and 33,334 granted to Karol Gray on April 14, 2014, pursuant to the 2005 Incentive Stock Plan, which vest 25% of the underlying shares ratably on each anniversary thereafter until fully vested on the fourth anniversary of the date of grant.

(3) Based upon 17,309,702 shares of common stock outstanding as of December 11, 2014. Each beneficial owner's percentage ownership is determined by assuming that the Currently Exercisable Options that are held by such person (but not those held by any other person) have been exercised and converted.

(4) Includes 1,827,401 shares underlying currently exercisable options and warrants.

(5) Includes 59,756 shares underlying currently exercisable options and warrants.

(6) Includes 42,977, 35,882 and 35,882 shares underlying currently exercisable options for Ms. Gray, Messrs. Bitzer and Ryan, respectively.

(7) Includes 1,129,036 shares of common stock and 84,199 warrants owned by Delabarta, Inc., a wholly-owned subsidiary of ABARTA, Inc. Mr. Bitzer is President and a member of the board of directors of each of Delabarta, Inc. and ABARTA, Inc. Mr. Bitzer disclaims beneficial ownership of the shares held by Delabarta, Inc. except to the extent of his pecuniary interest therein.

- (8) Includes 297,290 shares underlying currently exercisable options and warrants.
- (9) Includes 48,333 shares underlying currently exercisable options and warrants.
- (10) Includes 2,445,677 shares underlying currently exercisable options and warrants.
- (11) The address of the principal business office for the stockholder is 1000 Gamma Drive, Suite 500, Pittsburgh, PA 15238. John Bitzer, III, one of our directors is President and Chief Executive Officer of the stockholder. Mr. Bitzer disclaims beneficial ownership of the shares held by the stockholder, except to the extent of his pecuniary interest therein.
- (12) Includes 1,456 shares underlying currently exercisable warrants for both Ms. Gray and Ms. Murrah.
- (13) Includes 12,501 shares underlying currently exercisable options for Ms. Murrah.

**Equity Compensation Plan Information**

***2005 Incentive Stock Plan***

In 2005, the Board of Directors and the holders of a majority of the outstanding shares of Common Stock approved the 2005 Incentive Stock Plan. In 2007, 2008 and 2012, the Board of Directors and holders of a majority of the outstanding shares of Common Stock approved various increases in the number of shares of Common Stock that can be issued as stock awards and stock options thereunder.

The Board of Directors, in their discretion, may award stock and stock options to executive officers and key employees as part of their compensation for employment or for retention purposes.

The following table sets forth certain information regarding our compensation plans as of September 30, 2014:

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights (b)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a)) (c)
Equity compensation plans approved by security holders ( <i>2005 Incentive Stock Plan</i> )	2,909,046	\$ 4.74	2,271,302
Equity compensation plans not approved by security holders	—	\$ —	—
Total	2,909,046	\$ 4.74	2,271,302

## ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

### James A. Hayward

**Promissory Note.** On September 11, 2014, we issued and sold promissory notes (the "Notes") in the aggregate principal amount of \$1,800,000 and bearing interest at a rate of 12.5% per annum to Dr. James A. Hayward, our President, Chairman and Chief Executive Officer (in the amount of \$1,000,000) and another individual (in the amount of \$800,000) both of whom are "accredited investors" as defined in regulations promulgated under the Securities Act of 1933, as amended (the "Securities Act").

The Notes had a ten month maturity. Interest was payable in cash or in shares of the common stock at the option of the holders of the Notes. The Notes could have been prepaid in whole or in part, at any time, subject to certain prepayment penalties. Upon an event of default, the Notes and all accrued interest thereon would have automatically converted into common stock at the closing price of the common stock on the date of issuance of the Notes. In the event of a consolidation or merger with another corporation in which we did not survive, the notes would have been paid in full.

On November 11, 2014, Dr. Hayward and the other individual agreed to exchange for cancellation their respective notes (including principal and accrued interest thereon) for 315,171 shares of common stock and warrants to purchase 315,171 shares of common stock, in the case of Dr. Hayward, and 252,137 shares of common stock and warrants to purchase 252,137 shares of common stock, in the case of the other individual, at \$3.25, the public offering price per share and warrant in our underwritten public offering which closed on November 20, 2014.

On November 20, 2014, Dr. Hayward purchased \$250,000 in common stock and warrants in our underwritten public offering on the same terms as the other investors in the offering.

### Delabarta, Inc./John Bitzer, III

John Bitzer, III, one of our directors, is President and Chief Executive Officer of ABARTA, Inc., a private, third-generation family holding-company, which owns Delabarta, Inc. On June 21, 2012, Abarta Partners I, a partnership administered by Mr. Bitzer for which his revocable trust is a partner, purchased 592,943 shares of our common stock at a purchase price of \$2.60 per share for gross proceeds of \$1,542,600 in a private placement transaction. On June 23, 2014, Delabarta, Inc. purchased 7,275 shares of our common stock at a purchase price of \$6.87 per share for gross proceeds of \$50,000 in a private placement transaction. Delabarta, Inc. also received 7,275 warrants to purchase shares of our common stock as part of this private placement transaction.

On November 20, 2014, Delabarta, Inc. purchased \$250,000 in common stock and warrants in our underwritten public offering on the same terms as the other investors in the offering.

### Policy and Procedure for Approval of Related Person Transactions

We have a formal policy that requires all related party transactions, which includes transactions with directors, officers and holders of five percent or more of our voting securities and any member of the immediate family of and any entity affiliated with any of the foregoing persons, to be approved by our audit committee. In approving or rejecting any such proposal, our audit committee will consider the relevant facts and circumstances available and deemed relevant to the committee, including, but not limited to, whether the transaction is on terms no less favorable than terms generally available to an unaffiliated third party under the same or similar circumstances and the extent of the related party's interest in the transaction.

### Director Independence

Our Board of Directors currently consists of six members: James A. Hayward, John Bitzer, III, Joseph D. Ceccoli, Charles S. Ryan Yacov A. Shamash, and Sanford R. Simon. Although our securities were not approved for listing on The NASDAQ Capital Market until our underwritten public offering in November 2014 and were not subject to the NASDAQ requirements that a majority of the Board of Directors be independent, the Board of Directors has determined that currently and at all times during the fiscal year ended September 30, 2014, each of our directors other than Dr. Hayward are "independent" as defined by the listing standards of the NASDAQ Capital Market, constituting a majority of independent directors of our Board of Directors as required by the rules of the NASDAQ Capital Market. The Board of Directors considers in its evaluation of independence whether any director has a relationship with us that would interfere with the exercise of independent judgment in carrying out his or her responsibilities of a director.

## ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES.

The following table sets forth fees billed to us by our current and former independent auditors during fiscal years ended September 30, 2014 and 2013 for: (i) services rendered for the audit of our annual financial statements and the review of our quarterly financial statements, (ii) services by our auditor that are reasonably related to the performance of the audit or review of our financial statements and that are not reported as Audit Fees, (iii) services rendered in connection with tax compliance, tax advice and tax planning, and (iv) all other fees for services rendered.

RBSM LLP (1)		Fiscal year ended September 30, 2014	Fiscal year ended September 30, 2013
(i)	Audit Fees	\$ 98,500	\$ 75,000
(ii)	Audit Related Fees	37,000	9,000
(iii)	Tax Fees	7,000	7,000
(iv)	All Other Fees	—	—
	Total Fees	\$ 142,500	\$ 91,000

Marcum LLP (2)		Fiscal year ended September 30, 2014	Fiscal year ended September 30, 2013
(i)	Audit Fees	\$ 104,000	\$ —
(ii)	Audit Related Fees	—	—
(iii)	Tax Fees	—	—
(iv)	All Other Fees	—	—
	Total Fees	\$ 104,000	\$ —

(1) RBSM served as our independent auditors through June 23, 2014

(2) Marcum is our current independent auditors commencing on June 23, 2014

*Audit Fees* -- Consists of fees billed for professional services rendered for the audit of our consolidated financial statements and review of the interim consolidated financial statements included in quarterly reports and services that are normally provided by our independent auditors in connection with statutory and regulatory filings or engagements.

*Audit Related Fees* -- Consists of fees billed for assurance and related services that are reasonably related to the performance of the audit or review of our consolidated financial statements and are not reported under "Audit Fees." These services consist of responding to SEC comments in connection with our filings with the SEC and the review of and consent to registration statements.

*Tax Fees* -- Consists of fees billed for professional services for tax compliance, tax advice and tax planning.

*All Other Fees* -- Consists of fees for products and services other than the services reported above. There were no management consulting services provided in fiscal 2013.

The Board of Directors has considered whether the provision of non-audit services is compatible with maintaining the principal accountant's independence.

#### **Policy on Audit Committee Pre-Approval of Audit and Permissible Non-Audit Services of Independent Auditors**

The audit committee has adopted a policy and procedures for the pre-approval of audit and non-audit services provided by the independent auditors. These services may include audit services, audit-related services, tax services and other services. Pre-approval is generally provided for up to one year and any pre-approval is detailed as to the particular service or category of services and is generally subject to a specific budget. The independent auditors and management are required to periodically report to our audit committee regarding the extent of services provided by the independent auditors in accordance with this pre-approval, and the fees for the services performed to date. The audit committee may also pre-approve particular services on a case-by-case basis.

**ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.**

(a) We have filed the following documents as part of this Form 10-K:

1. Consolidated Financial Statements

Our consolidated financial statements at September 30, 2014 and 2013 and for the years ended September 30, 2014, 2013 and 2012, and the notes thereto, together with the report of our independent registered public accounting firm on those consolidated financial statements, are hereby filed as part of this report beginning on page F-1.

2. Financial Statement Schedule

All financial statement schedules have been omitted since the required information is not applicable or is not present in amounts sufficient to require submission of the schedule, or because the information required is included in the consolidated financial statements and notes thereto.

3. Exhibits.

The information required by this item is set forth on the exhibit index that follows the signature page of this report.



## 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.

**APPLIED DNA SCIENCES, INC.**

Date: December 15, 2014

/s/ James A. Hayward  
James A. Hayward  
*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>Name</u>	<u>Position</u>	<u>Date</u>
<u>/s/ JAMES A. HAYWARD</u> James A. Hayward	Chief Executive Officer ( <i>Principal Executive Officer</i> ), President, Chairman of the Board of Directors and Director	December 15, 2014
<u>/s/ KAROL K. GRAY</u> Karol K. Gray	Chief Financial Officer ( <i>Principal Financial Officer and Principal Accounting Officer</i> )	December 15, 2014
<u>/s/ JOHN BITZER, III</u> John Bitzer, III	Director	December 15, 2014
<u>/s/ JOSEPH D. CECCOLI</u> Joseph D. Ceccoli	Director	December 15, 2014
<u>/s/ CHARLES S. RYAN</u> Charles S. Ryan	Director	December 15, 2014
<u>/s/ YACOV A. SHAMASH</u> Yacov A. Shamash	Director	December 15, 2014
<u>/s/ SANFORD R. SIMON</u> Sanford R. Simon	Director	December 15, 2014

**EXHIBIT INDEX**

The following exhibits are included as part of this Form 10-K. References to "the Company" in this Exhibit List mean Applied DNA Sciences, Inc., a Delaware corporation.

<b>Exhibit Number</b>	<b>Description</b>	<b>Incorporated by Reference</b>			<b>Filed or Furnished Herewith</b>
		<b>Form</b>	<b>File No.</b>	<b>Date Filed</b>	
3.1	Certificate of Incorporation	8-K	002-90539	1/16/2009	
3.2	Certificate of Amendment of Certificate of Incorporation	8-K	002-90539	6/30/2010	
3.3	Second Certificate of Amendment of Certificate of Incorporation	8-K	002-90539	1/30/2012	
3.4	Third Certificate of Amendment of Certificate of Incorporation	8-K	002-90539	10/29/2014	
3.5	Form of Certificate of Designations of the Series A Convertible Preferred Stock	8-K	002-90539	11/29/2012	
3.6	Form of Certificate of Designations of the Series B Convertible Preferred Stock	8-K	002-90539	7/22/2013	
3.7	By-Laws	8-K	002-90539	1/16/2009	
4.1	Form of Series A Warrants issued to Crede CG III, Ltd. as of July 19, 2013	8-K	002-90539	7/22/2013	
4.2	Form of Series B Warrants issued to Crede CG III, Ltd. as of July 19, 2013	8-K	002-90539	7/22/2013	
4.3	Registration Rights Agreement dated as of July 19, 2013 by and between Applied DNA Sciences, Inc. and Crede CG III, Ltd.	8-K	002-90539	7/22/2013	
4.4	Registration Rights Agreement dated as of November 28, 2012 by and between Applied DNA Sciences, Inc. and Crede CG II, Ltd.	8-K	002-90539	11/29/2012	
10.1†	Applied DNA Sciences, Inc. 2005 Stock Incentive Plan and form of employee stock option agreement thereunder, amended and restated as of January 27, 2012	10-Q	002-90539	5/15/2012	
10.2*	Joint Development and Marketing Agreement, dated April 18, 2007 by and between Applied DNA Sciences and International Imaging Materials, Inc.	8-K	002-90539	4/24/2007	
10.4	Agreement, dated August 11, 2008, by and between Huddersfield and Textile Training Company, Limited and Applied DNA Sciences, Inc.	10-K/A	002-90539	7/25/2011	
10.5	Form of Subscription Agreement, dated July 15, 2011, by and among Applied DNA Sciences, Inc. and the investors named on the signature pages thereto	10-K	002-90539	12/9/2011	
10.6	Form of Warrant, dated July 15, 2011, issued to the investors named on the signature pages	10-K	002-90539	12/9/2011	
10.9†	Employment Agreement, dated July 11, 2011, between James A. Hayward and Applied DNA Sciences, Inc.	10-K	002-90539	12/9/2011	
10.11*	Exclusive Sales Agreement dated November 1, 2011 by and between Applied DNA Sciences, Inc. and Nissha Printing Co., Ltd.	10-Q	002-90539	2/14/2012	
10.12	Software Distribution Agreement, dated as of January 25, 2012, by and between Applied DNA Sciences, Inc. and DivineRune, Inc.	10-Q	002-90539	5/15/2012	
10.13	Form of Subscription Agreement dated June 21, 2012, by and among Applied DNA Sciences, Inc. and the investor named on the signature page thereto	10-K	002-90539	12/20/2013	
10.14†	Form of Indemnification Agreement dated as of September 7, 2012, by and between Applied DNA Sciences, Inc. and each of its directors and executive officers	8-K	002-90539	9/13/2012	

Exhibit Number	Description	Incorporated by Reference			Filed or Furnished Herewith
		Form	File No.	Date Filed	
10.15	Securities Purchase Agreement dated as of November 28, 2012 by and between Applied DNA Sciences, Inc. and Crede CG II, Ltd.	8-K	002-90539	11/29/2012	
10.16	Securities Purchase Agreement dated as of July 19, 2013, between Applied DNA Sciences, Inc. and Crede CG III, Ltd.	8-K	002-90539	7/22/2013	
10.17†	Employment Offer Letter dated August 6, 2013, between Applied DNA Sciences, Inc. and Karol Gray	10-K	002-90539	12/20/2013	
10.18	Asset Purchase Agreement dated May 10, 2013, between Applied DNA Sciences, Inc. and RedWeb Technologies Limited	10-Q	002-90539	8/13/2013	
10.19	Agreement of Lease dated June 14, 2013, between Applied DNA Sciences, Inc. and Long Island High Technology Incubator, Inc.	10-Q	002-90539	8/13/2013	
10.20*	Term sheet for Mutual Cooperation with Borealis AG dated March 31, 2014	8-K/A	002-90539	7/22/2014	
10.21	Form of Subscription Agreement dated June 3, 2014	8-K	002-90539	6/6/2014	
10.22	Form of Warrant dated June 3, 2014	8-K	002-90539	6/6/2014	
10.23	Form of Award/Contract issued by U.S. Missile Defense Agency dated July 14, 2014	8-K	002-90539	7/18/2014	
10.24	Form of Promissory Note	8-K	002-90539	9/17/14	
10.25	Form of Warrant Agreement between Applied DNA Sciences, Inc. and American Stock Transfer & Trust Company, LLC as warrant agent	8-K	002-90539	11/20/14	
10.26	Form of Underwriter's Warrant	S-1/A	333-199121	10/30/2014	
10.27	Form of Award/Contract awarded by Office of Secretary of Defense on behalf of Defense Logistics Agency dated August 28, 2014	8-K/A	002-90539	9/8/2014	
10.28	Warrant Repurchase Option Agreement dated October 28, 2014 between Applied DNA Sciences, Inc. and Crede CG III, Ltd.	S-1/A	333-199121	10/30/2014	
10.29	Letter Agreement dated November 11, 2014 between Applied DNA Sciences, Inc. and James A. Hayward regarding Exchange of 12.5% Promissory Note	S-1/A	333-199121	11/12/2014	
10.30	Underwriting agreement between Applied DNA Sciences, Inc. and Maxim Group LLC dated November 17, 2014				Filed
21.1	Subsidiaries of Applied DNA Sciences, Inc.	S-1/A	333-199121	10/30/2014	
23.1	Consent of Marcum LLP				Filed
23.2	Consent of RBBSM LLP				Filed
101 INS	XBRL Instance Document				Filed
101 SCH	XBRL Taxonomy Extension Schema Document				Filed
101 CAL	XBRL Taxonomy Extension Calculation Linkbase Document				Filed
101 DEF	XBRL Taxonomy Extension Definitions Linkbase Document				Filed
101 LAB	XBRL Taxonomy Extension Labels Linkbase Document				Filed
101 PRE	XBRL Taxonomy Extension Presentation Linkbase Document				Filed

† Indicates a management contract or any compensatory plan, contract or arrangement.

\* A request for confidentiality has been granted for certain portions of the indicated document. Confidential portions have been omitted and filed separately with the SEC as required by Rule 24b-2 promulgated under the Exchange Act.

**APPLIED DNA SCIENCES, INC.**  
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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Audit Committee of the  
Board of Directors and Shareholders of  
Applied DNA Sciences, Inc.

We have audited the accompanying consolidated balance sheets of Applied DNA Sciences, Inc. (the "Company") as of September 30, 2014, and the related consolidated statements of operations, stockholders' equity and cash flows for the year then ended. 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 audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the 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 audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Applied DNA Sciences, Inc. as of September 30, 2014, and the consolidated results of its operations and its cash flows for the year ended September 30, 2014 in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Applied DNA Sciences, Inc.'s internal control over financial reporting as of September 30, 2014, based on the criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated December 15, 2014 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

/s/ Marcum llp

Marcum llp  
Melville, NY  
December 15, 2014

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of  
Applied DNA Sciences, Inc.:

We have audited the accompanying consolidated balance sheet of Applied DNA Sciences, Inc. (the "Company") as of September 30, 2013 and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the two years in the period ended September 30, 2013. 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 financial statements are free of material misstatements. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Applied DNA Sciences, Inc. as of September 30, 2013, and the consolidated results of its operations and its cash flows for each of the two years in the period ended September 30, 2013, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of September 30, 2013, based on the criteria established in Internal Control – Integrated Framework 1992 issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated May 1, 2014 expressed an adverse opinion on the Company's internal control over financial reporting.

/s/ RBSM LLP

New York, New York  
May 1, 2014, except paragraph 3 to Note B,  
as to which the date is October 29, 2014

**APPLIED DNA SCIENCES, INC.**  
**CONSOLIDATED BALANCE SHEETS**  
**SEPTEMBER 30, 2014 AND 2013**

	September 30,	
	2014	2013
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 1,393,132	\$ 6,360,301
Accounts receivable, net of allowance of \$9,634 and \$62,415 at September 30, 2014 and 2013, respectively	834,818	672,638
Prepaid expenses	135,365	174,096
Total current assets	2,363,315	7,207,035
Property, plant and equipment-net of accumulated depreciation of \$759,087 and \$409,629 at September 30, 2014 and 2013, respectively	576,128	695,995
Other assets:		
Deposits	57,638	51,260
Deferred offering costs	181,104	--
Intangible assets:		
Intellectual property, net of accumulated amortization and impairment of \$256,208 and \$163,403, as of September 30, 2014 and 2013, respectively	327,872	420,676
Total Assets	\$ 3,506,057	\$ 8,374,966
<b>LIABILITIES AND STOCKHOLDERS' (DEFICIT) EQUITY</b>		
Current liabilities:		
Accounts payable and accrued liabilities, including related party accrued interest of \$6,597 and \$-- at September 30, 2014 and 2013, respectively	\$ 1,494,759	\$ 966,977
Promissory notes payable, including \$1,000,000 with a related party (see Note E)	1,800,000	-
Deferred revenue	583,362	148,503
Total current liabilities	3,878,121	1,115,480
Warrant liability	1,096,412	2,643,449
Total liabilities	4,974,533	3,758,929
Commitments and contingencies (Note K)	-	-
Stockholders' (Deficit) Equity		
Preferred stock, par value \$0.001 per share; 10,000,000 shares authorized; -0- shares issued and outstanding as of September 30, 2014 and 2013	-	-
Series A Preferred stock, par value \$0.001 per share; 10,000,000 shares authorized; -0- issued and outstanding as of September 30, 2014 and 2013	-	-
Series B Preferred stock, par value \$0.001 per share; 10,000,000 shares authorized; -0- issued and outstanding as of September 30, 2014 and 2013	-	-
Common stock, par value \$0.001 per share; 1,350,000,000 shares authorized; 13,935,954 and 13,108,783 shares issued and outstanding as of September 30, 2014 and 2013, respectively	13,937	13,109
Additional paid in capital	198,277,859	191,296,539
Accumulated deficit	(199,760,272)	(186,693,611)
Total stockholders' (deficit) equity	(1,468,476)	4,616,037
Total Liabilities and Stockholders' (Deficit) Equity	\$ 3,506,057	\$ 8,374,966

See the accompanying notes to the consolidated financial statements

**APPLIED DNA SCIENCES, INC.**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
**YEARS ENDED SEPTEMBER 30, 2014, 2013 AND 2012**

	For the year ended September 30,		
	2014	2013	2012
Revenues	\$ 2,721,224	\$ 2,036,222	\$ 1,854,694
Operating expenses:			
Selling, general and administrative	13,249,753	11,198,505	7,615,734
Research and development	1,300,750	692,480	432,669
Depreciation and amortization	442,262	321,074	313,940
Total operating expenses	14,992,765	12,212,059	8,362,343
LOSS FROM OPERATIONS	(12,271,541)	(10,175,837)	(6,507,649)
Other income (expense):			
Interest income (expense), net (including related party interest of \$6,597, \$-- and \$-- for the years ended September 30, 2014, 2013 and 2012, respectively)	(11,029)	1,272	(643,063)
Other income (expense), net	123,914	(3,761)	-
Loss on change in fair value of warrant liability	(908,005)	(7,508,146)	-
Loss before provision for income taxes	(13,066,661)	(17,686,472)	(7,150,712)
Income taxes (benefit)	-	-	-
NET LOSS	\$ (13,066,661)	\$ (17,686,472)	\$ (7,150,712)
Net loss per share-basic and diluted	\$ (0.97)	\$ (1.51)	\$ (0.74)
Weighted average shares outstanding-basic and diluted	13,515,518	11,730,879	9,601,525

See the accompanying notes to the consolidated financial statements



**APPLIED DNA SCIENCES, INC.**  
**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)**  
**YEARS ENDED SEPTEMBER 30, 2014, 2013 and 2012**

	<u>Preferred Shares</u>	<u>Preferred Stock Amount</u>	<u>Common Shares</u>	<u>Common Stock Amount</u>	<u>Additional Paid in Capital</u>	<u>Accumulated Deficit</u>	<u>Total</u>
Balance, October 1, 2011	—	\$ —	7,888,764	\$ 7,889	\$ 160,853,153	\$ (161,856,427)	\$ (95,385)
Common stock issued in settlement of convertible debentures and interest	—	—	2,042,198	2,042	4,787,898	—	4,789,940
Sale of common stock	—	—	749,392	750	2,100,250	—	2,101,000
Exercise of warrants and options cashlessly	—	—	89,355	89	(89)	—	—
Fair value of warrants issued for services	—	—	—	—	58,238	—	58,238
Equity based compensation	—	—	—	—	1,953,844	—	1,953,844
Net loss	—	—	—	—	—	(7,150,712)	(7,150,712)
Balance, September 30, 2012	—	—	10,769,709	10,770	169,753,294	(169,007,139)	756,925
Sale of Series A preferred stock	5,500	6	—	—	5,499,994	—	5,500,000
Sale of Series B preferred stock	5,500	6	—	—	5,234,994	—	5,235,000
Sale of common stock	—	—	357,464	359	1,437,787	—	1,438,146
Common stock issued in conversion of Series A preferred stock	(5,500)	(6)	424,383	424	(418)	—	—
Common stock issued in conversion of Series B preferred stock	(5,500)	(6)	705,128	705	(699)	—	—
Exercise of warrants and options	—	—	25,417	25	151,475	—	151,500
Purchase and cancellation of issued warrants	—	—	—	—	(60,000)	—	(60,000)
Fair value of warrants issued for services	—	—	—	—	28,256	—	28,256
Reclassification of warrants upon exercise	—	—	—	—	7,326,553	—	7,326,553
Exercise of warrants cashlessly	—	—	749,357	749	(749)	—	—
Equity based compensation	—	—	—	—	1,926,129	—	1,926,129
Exercise of options cashlessly	—	—	77,325	77	(77)	—	—
Net loss	—	—	—	—	—	(17,686,472)	(17,686,472)
Balance, September 30, 2013	—	—	13,108,783	13,109	191,296,539	(186,693,611)	4,616,037
Reclassification of warrants upon exercise	—	—	—	—	2,455,042	—	2,455,042
Exercise of warrants cashlessly	—	—	326,164	326	(326)	—	—
Common stock issued for settlement of consulting services	—	—	41,667	42	337,459	—	337,501
Shares issued in private placement	—	—	313,757	314	2,155,950	—	2,156,264
Exercise of options cashlessly	—	—	145,583	146	(146)	—	—
Stock based compensation expense	—	—	—	—	2,033,341	—	2,033,341
Net loss	—	—	—	—	—	(13,066,661)	(13,066,661)
Balance, September 30, 2014	—	\$ —	13,935,954	\$ 13,937	\$ 198,277,859	\$ (199,760,272)	\$ (1,468,476)

See the accompanying notes to the consolidated financial statements

**APPLIED DNA SCIENCES, INC.**  
**CONSOLIDATED STATEMENT OF CASH FLOWS**  
**YEARS ENDED SEPTEMBER 30, 2014, 2013 AND 2012**

	For the year ended September 30,		
	2014	2013	2012
<b>Cash flows from operating activities:</b>			
Net loss	\$ (13,066,661)	\$ (17,686,472)	\$ (7,150,712)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	442,262	206,344	313,940
Impairment of intellectual property	-	114,730	-
Stock based compensation expense	1,964,053	1,517,524	1,953,844
Change in fair value of warrant liability	908,005	7,508,146	-
Amortization of capitalized financing costs	-	-	85,975
Amortization of debt discount attributable to convertible debentures	-	-	541,120
Fair value of vested warrants issued for service	-	28,256	58,238
Common stock issued in settlement of interest	-	-	102,844
Fair value change from employee option modifications	69,288	408,605	-
Common stock issued for consulting services	337,501	-	-
Bad debt expense	19,755	77,415	-
<i>Change in operating assets and liabilities:</i>			
Accounts receivable	(181,935)	(453,059)	(88,407)
Prepaid expenses and deposits	32,352	(109,042)	(16,565)
Accounts payable and accrued liabilities	527,783	517,200	239,044
Deferred revenue	434,859	-	-
Net cash used in operating activities	<u>(8,512,738)</u>	<u>(7,870,353)</u>	<u>(3,960,679)</u>
<b>Cash flows used in investing activities:</b>			
Purchase of assets under RedWeb asset purchase agreement	-	(584,080)	-
Purchase of property and equipment	(229,591)	(636,548)	(162,833)
Net cash used in investing activities	<u>(229,591)</u>	<u>(1,220,628)</u>	<u>(162,833)</u>
<b>Cash flows from financing activities:</b>			
Net proceeds from sale of Series A and Series B Preferred Stock	-	10,735,000	-
Net proceeds from sale of common stock and warrants	2,156,264	3,900,000	2,101,000
Proceeds from promissory notes, including \$1,000,000 from a related party	1,800,000	-	-
Deferred offering costs	(181,104)	-	-
Purchase and cancellation of previously issued warrants	-	(60,000)	-
Proceeds from exercise of options and warrants	-	151,500	-
Net cash provided by financing activities	<u>3,775,160</u>	<u>14,726,500</u>	<u>2,101,000</u>
Net increase (decrease) in cash and cash equivalents	(4,967,169)	5,635,519	(2,022,512)
Cash and cash equivalents at beginning of year	6,360,301	724,782	2,747,294
Cash and cash equivalents at end of year	<u>\$ 1,393,132</u>	<u>\$ 6,360,301</u>	<u>\$ 724,782</u>
<b>Supplemental Disclosures of Cash Flow Information:</b>			
Cash paid during period for interest	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Cash paid during period for income taxes	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Non-cash investing and financing transactions:</b>			
Reclassification of warrants from liability to equity upon exercise of warrants	<u>\$ 2,455,042</u>	<u>\$ -</u>	<u>\$ -</u>
Property, plant and equipment acquired, and included in accounts payable	<u>\$ -</u>	<u>\$ 6,273</u>	<u>\$ -</u>
Common stock issued upon conversion of Series A and Series B preferred stock	<u>\$ -</u>	<u>\$ 1,129</u>	<u>\$ -</u>
Common stock issued for cashless exercise of options and warrants	<u>\$ 472</u>	<u>\$ 826</u>	<u>\$ -</u>
Common stock issued in exchange for previously incurred debt and related accrued interest	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 4,687,096</u>

See the accompanying notes to the consolidated financial statements

**APPLIED DNA SCIENCES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**SEPTEMBER 30, 2014**

**NOTE A – LIQUIDITY AND MANAGEMENT'S PLAN**

The Company has recurring net losses, which have resulted in an accumulated deficit of \$199,760,272 as of September 30, 2014. The Company incurred a net loss of \$13,066,661 and generated negative operating cash flow of \$8,512,738 for the fiscal year ended September 30, 2014. The Company also has a working capital deficit of \$1,514,806 as of September 30, 2014. At September 30, 2014 the Company had cash and cash equivalents of \$1,393,132. The Company's current capital resources include cash and cash equivalents and other working capital resources. Historically, the Company has financed its operations principally from the sale of equity securities. The Company raised \$2,156,264 in a private placement of common stock and warrants and \$1,800,000 in promissory notes during the fiscal year ended September 30, 2014, including \$1,000,000 from a related party. See Notes H and E, respectively. As discussed in Note M, on November 20, 2014 the Company closed its underwritten public offering of common stock and warrants for gross proceeds of \$9.1 million before deducting underwriting discounts and offering expenses. The Company utilized \$4,091,000 of the gross proceeds to repurchase the remaining Series B Warrants from Crede, as discussed in Note F.

The Company expects to finance operations primarily through cash flows provided by operating activities provided that it achieves a sufficient level of future revenues. The Company estimates that its cash and cash equivalents are sufficient to fund operations for the next twelve months.

The Company will require additional funds to complete the continued development of its products, product manufacturing, and to fund expected additional losses from operations, until revenues are sufficient to cover the Company's operating expenses. If the Company is unsuccessful in obtaining the necessary additional financing, it will most likely be forced to reduce operations.

**NOTE B – SUMMARY OF ACCOUNTING POLICIES**

Business and Basis of Presentation

On September 16, 2002, Applied DNA Sciences, Inc. (the "Company") was incorporated under the laws of the State of Nevada. Effective December 17, 2008, the Company reincorporated from the State of Nevada to the State of Delaware. The Company is principally devoted to developing DNA embedded biotechnology security solutions in the United States and Europe. To date, the Company has generated limited sales revenues from services and products; it has incurred expenses and has sustained losses. Consequently, its operations are subject to all risks inherent in the establishment of an early stage company. For the period from inception through September 30, 2014, the Company has accumulated losses of \$199,760,272.

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries, APDN (B.V.I.) Inc. and Applied DNA Sciences Europe Limited, which currently have no operations. Significant inter-company transactions and balances have been eliminated in consolidation.

On October 24, 2014, the Company filed a Third Certificate of Amendment of its Certificate of Incorporation with the Secretary of State of the State of Delaware that effected a one-for-60 (1:60) reverse stock split of its common stock, par value \$.001 per share, and a decrease in its authorized common stock, from 1,350,000,000 to 500,000,000 shares, effective October 29, 2014. All warrant, option, share, and per share information in the consolidated financial statements gives retroactive effect to a one-for-60 reverse stock split that was effected on October 29, 2014.

Use of Estimates

The preparation of the financial statements in conformity with GAAP requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Management bases its estimates on historical experience and on various assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. The most complex and subjective estimates include recoverability of long-lived assets, including the useful lives assigned to intangible assets and property and equipment, fair value calculations for warrants and stock based compensation, contingencies and allowance for doubtful accounts. Management reviews its estimates on a regular basis and the effects of any material revisions are reflected in the consolidated financial statements in the period they are deemed necessary. Accordingly, actual results could differ from those estimates.

**APPLIED DNA SCIENCES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**SEPTEMBER 30, 2014**

**NOTE B – SUMMARY OF ACCOUNTING POLICIES, continued**

Revenue Recognition

The Company recognizes revenue in accordance with Accounting Standards Codification ("ASC") 605, Revenue Recognition ("ASC 605"). ASC 605 requires that four basic criteria must be met before revenue can be recognized: (1) persuasive evidence of an arrangement exists; (2) delivery has occurred and/or service has been performed; (3) the selling price is fixed and determinable; and (4) collectability is reasonably assured. Determination of criteria (3) and (4) are based on management's judgments regarding the fixed nature of the selling prices of the products delivered or services provided and the collectability of those amounts. Provisions for allowances and other adjustments are provided for in the same period the related sales are recorded. The Company defers any revenue for which the product has not been delivered, service has not been provided, or is subject to refund until such time that the Company and the customer jointly determine that the product has been delivered, the service has been provided, or no refund will be required. At September 30, 2014 and 2013, the Company recorded deferred revenue of \$583,362 and \$148,503, respectively.

Revenue arrangements with multiple components are divided into separate units of accounting if certain criteria are met, including whether the delivered component has stand-alone value to the customer. Consideration received is allocated among the separate units of accounting based on their respective selling prices. The selling price for each unit is based on vendor-specific objective evidence, or VSOE, if available, third party evidence if VSOE is not available, or estimated selling price if neither VSOE nor third party is available. The applicable revenue recognition criteria are then applied to each of the units.

Revenue for government contract awards, which supports the Company's development efforts on specific projects, is recognized as milestones are achieved as per the contract. The Company recognized revenue of approximately \$156,452, \$100,000 and \$0 from these contract awards during the fiscal years ended September 30, 2014, 2013 and 2012, respectively.

Cash Equivalents

For the purpose of the accompanying consolidated financial statements, all highly liquid investments with a maturity of three months or less are considered to be cash equivalents.

Accounts Receivable

The Company provides an allowance for doubtful accounts equal to the estimated uncollectible amounts. The Company's estimate is based on historical collection experience and a review of the current status of trade accounts receivable. It is reasonably possible that the Company's estimate of the allowance for doubtful accounts will change. At September 30, 2014 and 2013, the Company has an allowance for doubtful accounts of \$9,634 and \$62,415, respectively. The Company writes-off receivables that are deemed uncollectible.

Deferred offering costs

Deferred offering costs consist of fees paid in relation to legal, accounting, regulatory and printing work completed in preparation of equity offerings. Deferred offering costs will be charged against the proceeds from equity offerings. As of September 30, 2014 and 2013, deferred offering costs were \$181,104 and \$0, respectively.

Income Taxes

The Company accounts for income taxes in accordance with ASC 740, Income Taxes ("ASC 740-10") which requires the recognition of deferred tax liabilities and assets for the expected future tax consequences of events that have been included in the financial statement or tax returns. Under this method, deferred tax liabilities and assets are determined based on the difference between financial statements and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. Temporary differences between taxable income reported for financial reporting purposes and income tax purposes include, but not limited to, accounting for intangibles, warrants, equity based compensation and depreciation and amortization. The Company evaluates the recoverability of deferred tax assets and establishes a valuation allowance when it is more likely than not that some portion or all of the deferred tax asset will not be realized. During the years ended September 30, 2014 and 2013, the Company incurred losses from operations. Based upon these results and the trends in the Company's performance projected for fiscal year 2015, it is more likely than not that the Company will not realize any benefit from the deferred tax assets recorded by the Company in previous periods. Management makes judgments as to the interpretation of tax laws that might be challenged upon an audit and cause changes to previous estimates of tax liability. In management's opinion, adequate provisions for income taxes have been made for all years. If actual taxable income by tax jurisdiction varies from estimates, additional allowances or reversals of reserves may be necessary. The Company has identified its federal tax return and its state tax return in New York as "major" tax jurisdictions. Based on the Company's evaluation, it has been concluded that there are no significant uncertain tax positions requiring recognition in the Company's consolidated financial statements.

**APPLIED DNA SCIENCES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**SEPTEMBER 30, 2014**

**NOTE B – SUMMARY OF ACCOUNTING POLICIES, continued**

Income Taxes, continued

The Company believes that its income tax positions and deductions will be sustained on audit and does not anticipate any adjustments that will result in a material change to its financial position. It is the Company's policy to accrue interest and penalties on unrecognized tax benefits as components of income tax provision. The Company did not have any accrued interest or penalties as of September 30, 2014 and 2013. Tax years 2010 through 2012 remain subject to future examination by the applicable taxing authorities.

Property Plant and Equipment

Property plant and equipment are stated at cost and depreciated using the straight line method over their estimated useful lives. The estimated useful life for computer equipment, lab equipment and furniture is 3 to 5 years and leasehold improvements are amortized over the shorter of their useful life or the lease terms. Property plant and equipment consist of:

	September 30,	
	2014	2013
Computer equipment	\$ 77,182	\$ 43,555
Lab equipment	844,104	657,735
Furniture	164,997	164,997
Leasehold improvements	248,932	239,337
Total	1,335,215	1,105,624
Accumulated depreciation	759,087	409,629
Property and equipment, net	\$ 576,128	\$ 695,995

Depreciation expense for the years ended September 30, 2014, 2013 and 2012 were \$349,458, \$157,671 and \$41,096, respectively.

Impairment of Long-Lived Assets

The Company evaluates its long lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Events relating to recoverability may include significant unfavorable changes in business conditions, recurring losses, or a forecasted inability to achieve break-even operating results over an extended period. The Company evaluates the recoverability of long-lived assets based upon forecasted undiscounted cash flows. Should impairment in value be indicated, the carrying value of long-lived assets will be adjusted, based on estimates of future discounted cash flows resulting from the use and ultimate disposition of the asset. As of September 30, 2014, the Company concluded that its long-lived assets were not required to be tested for recoverability. For the year September 30, 2013, the Company recognized impairment charges of \$114,730 related to certain intellectual property.

Net Loss per Share

The Company presents loss per share utilizing a dual presentation of basic and diluted loss per share. Basic loss per share includes no dilution and has been calculated based upon the weighted average number of common shares outstanding during the period. Dilutive common stock equivalents consist of shares issuable upon the exercise of the Company's stock options and warrants.

**APPLIED DNA SCIENCES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**SEPTEMBER 30, 2014**

**NOTE B – SUMMARY OF ACCOUNTING POLICIES, continued**

Net Loss per Share, continued

For the years ended September 30, 2014, 2013 and 2012, common stock equivalent shares are excluded from the computation of the diluted loss per share as their effect would be anti-dilutive.

Securities that could potentially dilute basic net income per share in the future that were not included in the computation of diluted net loss per share because to do so would have been antidilutive for the fiscal years ended September 30, 2014, 2013 and 2012 are as follows:

	<b>2014</b>	<b>2013</b>	<b>2012</b>
Warrants	945,166	983,894	764,011
Employee options	2,909,046	2,024,249	2,086,814
	<b>3,854,212</b>	<b>3,008,143</b>	<b>2,850,825</b>

Stock Based Compensation

The Company accounts for stock-based compensation in accordance with ASC 718, Compensation ("ASC 718"). ASC 718 requires all share-based payments to employees, including grants of employee stock options, to be recognized in the statement of operations based on their fair values. Under the provisions of ASC 718, stock-based compensation costs is measured at the grant date, based on the fair value of the award, and is recognized as expense over the employee's requisite service period (generally the vesting period of the equity grant). The fair value of the Company's common stock options are estimated using the Black Scholes option-pricing model with the following assumptions: expected volatility, dividend rate, risk free interest rate and the expected life. The Company expenses stock-based compensation by using the straight-line method. In accordance with ASC 718, excess tax benefits realized from the exercise of stock-based awards are classified in cash flows from financing activities. The future realization of the reserved deferred tax assets related to these tax benefits associated with the exercise of stock options will result in a credit to additional paid in capital if the related tax deduction reduces taxes payable. The Company has elected the "with and without approach" regarding ordering of windfall tax benefits to determine whether the windfall tax benefit did reduce taxes payable in the current year. Under this approach, the windfall tax benefit would be recognized in additional paid-in-capital only if an incremental tax benefit is realized after considering all other benefits presently available.

Concentrations

Financial instruments and related items, which potentially subject the Company to concentrations of credit risk, consist primarily of cash, cash equivalents and trade receivables. The Company places its cash and temporary cash investments with high credit quality institutions. At times, such investments may be in excess of the FDIC insurance limit.

No customers represented greater than 10% of the Company's total revenues for the years ended September 30, 2014 and 2013. The Company's revenues earned from sale of products and services for the year ended September 30, 2012 included an aggregate of 54% from two customers of the Company's total revenues.

Research and Development

The Company accounts for research and development costs in accordance with the ASC 730, Research and Development ("ASC 730"). Under ASC 730, all research and development costs must be charged to expense as incurred. Accordingly, internal research and development costs are expensed as incurred. Third-party research and development costs are expensed when the contracted work has been performed or as milestone results have been achieved. Company-sponsored research and development costs related to both present and future products are expensed in the period incurred. The Company incurred research and development expenses of \$1,300,750, \$692,480 and \$432,669 for the years ended September 30, 2014, 2013 and 2012, respectively.

Advertising

The Company follows the policy of charging the costs of advertising to expense as incurred. The Company charged to operations \$99,128, \$196,762 and \$97,877 as advertising costs for the years ended September 30, 2014, 2013 and 2012, respectively.

APPLIED DNA SCIENCES, INC.  
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**NOTE B – SUMMARY OF ACCOUNTING POLICIES, continued**

Intangible Assets

The Company amortizes its intangible assets using the straight-line method over their estimated period of benefit. The estimated useful life for patents and other intellectual property is five years. All of the Company's intangible assets are subject to amortization.

Fair Value of Financial Instruments

The valuation techniques utilized are based upon observable and unobservable inputs. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect internal market assumptions. These two types of inputs create the following fair value hierarchy:

Level 1 — Quoted prices in active markets for identical assets or liabilities.

Level 2 — Observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the related asset or liabilities.

Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of assets or liabilities.

The Company utilizes observable market inputs (quoted market prices) when measuring fair value whenever possible.

For fair value measurements categorized within Level 3 of the fair value hierarchy, the Company's accounting and finance department, who report to the Chief Financial Officer, determine its valuation policies and procedures. The development and determination of the unobservable inputs for Level 3 fair value measurements and fair value calculations are the responsibility of the Company's accounting and finance department and are approved by the Chief Financial Officer.

Recently Adopted Accounting Principles

In August 2014, the Financial Accounting Standards Board ("FASB") issued ASU 2014-15, "Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern" ("ASU 2014-15"). ASU 2014-15 provides guidance on management's responsibility in evaluating whether there is substantial doubt about a company's ability to continue as a going concern and about related footnote disclosures. For each reporting period, management will be required to evaluate whether there are conditions or events that raise substantial doubt about a company's ability to continue as a going concern within one year from the date the financial statements are issued. The amendments in ASU 2014-15 are effective for annual reporting periods ending after December 15, 2016, and for annual and interim periods thereafter. Early adoption is permitted. The Company will adopt the methodologies prescribed by ASU 2014-15 by the date required, and does not anticipate that the adoption of ASU 2014-15 will have a material effect on its consolidated financial position or results of operations.

In June 2014, the FASB issued Accounting Standards Update 2014-12, "Accounting for share-based payments when the terms of an award provide that a performance target could be achieved after the requisite service period," ("ASU 2014-12") which requires performance-based awards with a performance target that affects vesting and that could be achieved after an employee completes the requisite service period to be accounted for as a performance condition. If performance targets are clearly defined and it is probable that the performance condition will be achieved, stock-based expense should be recognized over the remaining requisite service period. This guidance will be effective for fiscal years (and interim reporting periods within those years) beginning after December 15, 2015. Early adoption is permitted. The Company is in the process of evaluating the provisions of the ASU and assessing the potential effect on the Company's consolidated financial position or results of operations.

In May 2014, the FASB issued Accounting Standards Update 2014-09, "Revenue from Contracts with Customers," ("ASU 2014-09") which provides updated, comprehensive revenue recognition guidance for contracts with customers, including a new principles-based five step framework that eliminates much of the industry-specific guidance in current accounting literature. Under ASU 2014-09, revenue recognition is based on a core principle that companies recognize revenue in an amount consistent with the consideration it expects to be entitled to in exchange for the transfer of goods or services. The standards update also requires enhanced disclosures regarding the nature, amount, timing and uncertainty of recognized revenue. This guidance will be effective for fiscal years (and interim reporting periods within those years) beginning after December 15, 2016. The Company is in the process of evaluating the provisions of the ASU and assessing the potential effect on the Company's consolidated financial position or results of operations.

**APPLIED DNA SCIENCES, INC.**  
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**NOTE C – INTANGIBLE ASSETS**

On May 10, 2013, the Company entered into an Asset Purchase Agreement (the "Asset Purchase Agreement") with RedWeb Technologies Limited ("RedWeb"), a corporation incorporated and registered under the laws of England & Wales, to purchase certain assets of RedWeb ("Purchased Assets") relating to its forensic tagging security system for a purchase price of £400,000 (\$624,080). The Company completed the acquisition of the Purchased Assets on the same day. The Purchased Assets include RedWeb's Sentry 500 Intruder Spray System, RedWeb's Advanced Molecular Taggent Technology and all products relating thereto, certain intellectual property and supplies relating to the foregoing. £40,000 (\$62,408) of the purchase price shall be held in escrow for up to one year to be applied against the indemnification obligations of RedWeb pursuant to the Asset Purchase Agreement. The escrow was released during fiscal 2014 and the Company received approximately \$54,000. This transaction was accounted for as an asset acquisition in accordance with ASC 805. The Company assigned \$584,080 of the purchase price to intellectual property and the remaining \$40,000 was for supplies, which were expensed during the year ended September 30, 2013.

The Company recorded impairment expense of \$114,730 during the year ended September 30, 2013 related to certain intellectual property that was part of the purchased assets from RedWeb. The impairment related to two pending patents that were no longer valid as of September 30, 2013.

The identifiable intangible assets acquired and their carrying values at September 30, 2014 and 2013 are as follows:

	<u>2014</u>	<u>2013</u>
Intellectual property (Weighted average life of 5 years)	\$ 584,080	\$ 584,080
Impairment charges	<u>(114,730)</u>	<u>(114,730)</u>
	469,350	469,350
Less:		
Accumulated amortization	<u>(141,478)</u>	<u>(48,674)</u>
Intangible assets, net	<u>\$ 327,872</u>	<u>\$ 420,676</u>

Total amortization expense charged to operations for the years ended September 30, 2014, 2013 and 2012 were \$92,804, \$163,404 (includes \$114,730 of impairment expense) and \$272,844, respectively.

The following table presents the estimated amortization expense of the intangible assets for each of the four succeeding years as of September 30, 2014:

	<u>Amount</u>
2015	\$ 91,500
2016	91,500
2017	91,500
2018	<u>53,372</u>
Total	<u>\$ 327,872</u>



**APPLIED DNA SCIENCES, INC.**  
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**NOTE – ACCOUNTS PAYABLE AND ACCRUED LIABILITIES**

Accounts payable and accrued liabilities at September 30, 2014 and 2013 are as follows:

	2014	2013
Accounts payable	\$ 1,059,623	\$ 641,302
Accrued consulting fees	102,500	102,500
Accrued salaries payable	245,761	220,175
Accrued interest	11,875	-
Other accrued expenses	75,000	3,000
Total	<u>\$ 1,494,759</u>	<u>\$ 966,977</u>

**NOTE – PROMISSORY NOTES PAYABLE**

On September 11, 2014, the Company issued and sold promissory notes (the "Notes") in the aggregate principal amount of \$1,800,000 and bearing interest at a rate of 12.5% per annum to Dr. James A. Hayward, the Company's President, Chairman and Chief Executive Officer, in the amount of \$1,000,000, and to another individual, in the amount of \$800,000, both of whom are "accredited investors" as defined in regulations promulgated under the Securities Act of 1933, as amended (the "Securities Act").

The Notes have a ten month maturity. Interest may be payable in cash or in shares of common stock at the option of the holders of the Notes. Interest to be paid in shares shall be paid in shares of Common Stock equal to (i) the amount of interest payable, divided by (ii) the average of the closing prices for the five consecutive trading days immediately preceding the applicable interest date. The Notes may be prepaid in whole or in part, at any time, subject to certain prepayment penalties. Upon an event of default, the Notes and all accrued interest thereon shall automatically convert into common stock at the closing price of the common stock on the date of issuance of the Notes. In the event of a consolidation or merger with another corporation in which we do not survive, the Notes shall be paid in full. On November 11, 2014, Dr. Hayward and the other individual agreed to exchange for cancellation their respective notes (including principal and accrued interest thereon) for 315,171 shares of common stock and warrants to purchase 315,171 shares of common stock, in the case of Dr. Hayward, and 252,137 shares of common stock and warrants to purchase 252,137 shares of common stock, in the case of the other individual, at \$3.25 per share, the aggregate public offering per share price of common stock and warrants issued in the Company's underwritten public offering, which closed on November 20, 2014.

Interest expense for these promissory notes was \$11,875 for the fiscal year ended September 30, 2014.

**APPLIED DNA SCIENCES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
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**NOTE F – WARRANT LIABILITY**

On December 16, 2013, Crede CG III, Ltd ("Crede") effected the cashless exercise of 178,253 Series A Warrants and 116,667 Series B Warrants. At December 16, 2013 (date of exercise), the Company determined the fair value of the Warrants to be \$2,455,042 using the Binomial Lattice model with the following assumptions: fair value of the Company's Common Stock \$10.80 per share; dividend yield 0%; expected term 4.55 years; risk free interest rate: 1.55%; expected volatility of: 118.89%; and an exercise price of \$14.59. The change in fair value of the warrant liability on the day of exercise amounted to a loss of \$1,288,752 and was included in the other income (expense). Upon exercise, the fair value of the Series A Warrants and 116,667 of the Series B Warrants were reclassified to equity. The Series A and Series B Warrants are classified as liabilities due to certain provisions contained in the warrant agreements, which may cause an adjustment to the conversion rate or the number of warrants outstanding.

As of September 30, 2014 the fair value of the remaining 387,621 Series B Warrants was \$1,096,412. The fair value was determined using the Binomial Lattice model with the following assumptions: fair value of the Company's Common Stock \$5.46 per share; dividend yield 0%; expected term 3.80 years; risk free interest rate: 1.43%; expected volatility of: 98.41%; and the expected price at which holders are likely to exercise their Warrants of \$14.06 per share.

As of September 30, 2013, the fair value of the Series A and Series B Warrants was determined using the Binomial Lattice model with the following assumptions: fair value of the Company's common stock: \$0.09 per share; dividend yield: 0%; expected terms 4.80 years; risk free interest rate: 1.39%; expected volatility of 121.71%; and the expected price at which holders are likely to exercise their Warrants of \$14.59 per share.

The change in fair value of the warrant liability resulted in loss on change in fair value of \$908,005 and \$7,508,146, respectively, for the fiscal years ended September 30, 2014 and 2013.

On October 28, 2014, the Company entered into a warrant repurchase option agreement with Crede, pursuant to which it had the option to purchase between 50% and 100% of the Crede's Series B Warrant (currently exercisable for 387,621 shares of common stock) at a purchase price of \$10.55 per share underlying such Series B Warrant (up to an aggregate purchase price of \$4,091,000 for all of the Series B Warrant). On November 21, 2014, the Company exercised its option and repurchased 100% of Crede's Series B Warrant for an aggregate purchase price of \$4,091,000.

**NOTE G – RELATED PARTY TRANSACTIONS**

As discussed in Note M, the Company's Chief Executive Officer and an affiliated company of a member of the Company's board of directors participated in the Company's November 20, 2014 underwritten public offering.

As discussed in Note E, on September 11, 2014, the Company issued and sold a promissory note in the aggregate principal amount of \$1,000,000 and bearing interest at a rate of 12.5% per annum to Dr. James A. Hayward, the Company's President, Chairman and Chief Executive Officer. On November 11, 2014, Dr. Hayward agreed to exchange for cancellation of his note (including principal and accrued interest thereon) for 315,171 shares of common stock and warrants to purchase 315,171 shares of common stock, at \$3.25 per share, the aggregate public offering price of common stock and warrants issued in the Company's underwritten public offering which closed on November 20, 2014.

As discussed in Note H, certain members of the Company's senior management team and the Board of Directors participated in the June 3, 2014 private placement.

During the year ended September 30, 2012, the Company issued 382,075 shares of Common Stock in exchange for settlement of an aggregate of \$925,000 related party convertible promissory notes and accrued interest.

On June 21, 2012, Abarta Partners I, a partnership administered by Mr. Bitzer, one of the Company's directors, for which his revocable trust is a partner, purchased 592,943 shares of the Common Stock at a purchase price of \$2.60 per share for gross proceeds of \$1,542,600 in a private placement transaction.

**APPLIED DNA SCIENCES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
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**NOTE H – CAPITAL STOCK**

On October 24, 2014, the Company filed a Third Certificate of Amendment of its Certificate of Incorporation with the Secretary of State of the State of Delaware that effected a one-for-60 (1:60) reverse stock split of its common stock, par value \$.001 per share, and a decrease in its authorized common stock, from 1,350,000,000 to 500,000,000 shares, effective October 29, 2014. All warrant, option, share, and per share information in the consolidated financial statements gives retroactive effect to the one-for-60 reverse stock split that was effected on October 29, 2014. In addition, the Company is authorized to issue 10,000,000 shares of preferred stock with a \$.001 par value per share. As of September 30, 2014 and 2013, there were 13,935,954 and 13,108,783 shares of Common Stock issued and outstanding, respectively.

Preferred and Common Stock Transactions during the Year Ended September 30, 2014:

On December 16, 2013, Crede effected the cashless exercise of 178,253 Series A Warrants and 116,667 Series B Warrants, and the Company thereupon issued to Crede an aggregate of 313,718 shares of its Common Stock (see Note F).

On December 20, 2013, 41,667 shares of the Company's Common Stock were issued in connection with a settlement resulting from the termination of a consulting agreement. The fair value of the Common Stock was determined using the Company's stock price on December 20, 2013. The total fair value of \$337,501 was charged to operations.

On February 11, 2014, 12,446 shares of the Company's Common Stock were issued in connection with the cashless exercise of 16,667 warrants to acquire the Company's Common Stock.

On June 3, 2014, the Company closed a private placement of its Common Stock and warrants to purchase Common Stock with a group of investors, including members of the Company's senior management team and the Board of Directors, pursuant to subscription agreements for gross proceeds of \$2,145,956 ("Private placement"). The Company issued and sold 312,257 shares of its Common Stock at a purchase price of \$6.87 per share and warrants to purchase 312,257 shares of Common Stock. The purchase price of the Common Stock represented a 5% discount to the volume weighted average closing price of the Company's Common Stock from May 13, 2014 to May 16, 2014, which ranged from \$6.93 to \$7.47 per share during the period. The Warrants are exercisable at a price of \$8.25 per share (representing a 20% premium to the Purchase Price) for a period of one year and do not have cashless exercise provisions. The Common Stock purchased as well as the Common Stock to be issued upon exercise of the Warrants will be subject to the six month holding period provisions of Rule 144.

On July 8, 2014, the Company closed on an additional subscription agreement under this private placement, with the same terms as disclosed above. The Company issued and sold 1,500 shares of its Common Stock and warrants to purchase 1,500 shares of Common Stock for total proceeds of \$10,308.

This Private placement triggered the anti-dilution provision of the remaining Crede Series B warrants, as the purchase price of the Common Stock and the exercise price of the Warrants issued with the Private placement were below the exercise price in effect for the Crede Series B warrants. The exercise price of the Crede Series B warrants was adjusted from \$14.59 to \$14.09 per share and the number of warrants increased from 373,529 to 386,618 as of June 30, 2014. The Crede Series B warrants were further diluted with the issuance on July 8, 2014 of Common Stock and warrants as the exercise price was further adjusted to \$14.06 and the number of warrants was increased to 387,621 (see Note F).

On August 19, 2014, 145,583 shares of the Company's Common Stock were issued in connection with the cashless exercise of 341,668 options to acquire the Company's Common Stock.

Preferred and Common Stock Transactions during the Year Ended September 30, 2013:

As part of the Purchase Agreements with Crede on November 29, 2012 and July 19, 2013, the Company sold an aggregate of \$15,000,000 (\$7,500,000 per agreement) of its securities. The total net proceeds received under these two financings were \$14,635,000 (\$15,000,000 gross proceeds, less investment fees of \$365,000). The table below summarizes the securities issued as part of these Purchase Agreements.

<b>Securities Issued</b>	<b>Initial Purchase Agreement</b>		<b>Second Purchase Agreement</b>	
	<b>Shares issued</b>	<b>Price per share</b>	<b>Shares issued</b>	<b>Price per share</b>
Common Stock	179,211	\$ 11.16	178,253	\$ 11.22
Series A Warrants	179,211	\$ 13.39	178,253	\$ 14.59
Series B Warrants	492,831	\$ 13.39	490,196	\$ 14.59
Series C Warrants	448,029	\$ 13.39	445,633	\$ 14.59
Series A Preferred Stock	5,500	\$ 1,000	—	\$ —
Series B Preferred Stock	—	\$ —	5,500	\$ 1,000

**APPLIED DNA SCIENCES, INC.**  
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**NOTE H – CAPITAL STOCK (Continued)**

The Series A and Series B Preferred contained weighted average anti-dilution protection. The Series A and Series B Preferred did not accrue dividends except to the extent dividends were paid on the Common Stock. The Company's Common Stock was junior in rank to the Series A and Series B Preferred with respect to preferences as to dividends, distributions and payments upon the liquidation, dissolution and winding up of the Company. The Series A and Series B Preferred generally had no voting rights except as required by law. The Series A and Series B Preferred were converted into Common Stock as set forth below.

Crede may exercise Series A and Series B Warrants by paying in cash or on a cashless basis by exchanging such Warrants for Common Stock using the Black-Scholes value. In the event that the Common Stock trades at a price 25% or more above the exercise price of the Series A and Series B Warrants for a period of 20 consecutive days (with average daily dollar volume of Common Stock on the OTC Bulletin Board at least equal to \$300,000), the Company may obligate Crede to exercise such Warrants for cash.

Pursuant to registration rights agreements between the Company and Crede, the Company filed registration statements within 30 days of the Initial Closing of both purchase agreements. The registration statements covered the resale of all shares of Common Stock issuable pursuant to the Purchase Agreements, including the shares of Common Stock underlying the Series A and Series B Preferred and Series A, B and C Warrants. The Company has agreed to prepare and file amendments and supplements to the registration statements to the extent necessary to keep the registration statements effective for the period of time required under the Purchase Agreements.

The Series A and Series B Preferred and the Series A, B and C Warrants each contain a 9.9% "blocker" so that in no event shall the Series A and Series B Preferred or any of the Series A, B and C Warrants be convertible or exercisable (including through the cashless exercise exchange provision) into or for Common Stock to the extent that such conversion or exercise would result in Crede having "beneficial ownership" (within the meaning of Section 13(d) of the Securities Exchange Act of 1934, as amended) of more than 9.9% of the Common Stock. Crede would, however, have the right from time to time to convert, exercise or exchange for shares of Common Stock, which over time would aggregate to greater than 9.9% beneficial ownership if all such shares of Common Stock so acquired had been held at one time by Crede.

Crede has the right to participate in other equity or equity-linked financings completed by the Company for a period of 180 days from the date the registration statement went effective on July 30, 2013.

In addition, the Company has agreed not to issue additional Common Stock or securities convertible into Common Stock at a price below the per share price issued to Crede under the Second Purchase Agreement, \$11.22, or the market price of the Common Stock on the day before the registration statement was declared effective (\$10.02), for a period of 180 days from the effective date of the registration statement, except for issuances (i) pursuant to acquisitions, joint ventures, license arrangements, leasing arrangements and other similar arrangements, (ii) to employees, consultants, directors and officers approved by the Board or pursuant to a plan approved by the Board, (iii) pursuant to one or more contracts entered into by the Company with third parties which would result in revenues to the Company during a three-month period equal to an annual run rate of \$15 Million in revenues and (iv) pursuant to a contract entered into by the Company with a third party which would reasonably be expected to result in more than \$3 Million in annual receivables.

Until one year after the Second Closing, which occurred on July 31, 2013, the Company is prohibited from entering into any transaction to (i) sell any convertible securities at a conversion rate or other price that is generally based on and/or varies with the trading prices of the Company's Common Stock at any time after the initial issuance of such convertible securities or (ii) sell securities at a future determined price, including, without limitation, an "equity line of credit" or an "at the market offering."

On January 8, 2013, Crede exercised its option and converted the Series A Preferred into 424,383 shares of the Company's Common Stock at a conversion price of \$12.96 per share and on April 25, 2013, Crede effected the cashless exercise of the Series A and Series B Warrants related to the Initial Purchase Agreement. Also, on August 14, 2013, the Company exercised its option and converted the Series B Preferred into 705,128 shares of the Company's Common Stock at a conversion price of \$7.80 per share. On January 22, 2013, the Company exercised its option to repurchase the Series C warrants related to the Initial Purchase Agreement and on August 14, 2013, the Company exercised its option to repurchase the Series C Warrants related to the Second Purchase Agreement for \$50,000 and \$10,000, respectively.

**APPLIED DNA SCIENCES, INC.**  
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**NOTE I – STOCK OPTIONS AND WARRANTS**

Warrants

The following table summarizes the changes in warrants outstanding and the related prices for the shares of the Company's Common Stock issued to non-employees of the Company. These warrants were granted in lieu of cash compensation for services performed or financing expenses in connection with the sale of the Company's Common Stock.

Exercise Prices	Number Outstanding	Warrants Outstanding Remaining Contractual Life (Years)	Weighted Average Exercise Price	Weighted Average Exercisable	Exercisable Weighted Average Exercise Price
\$ 2.40	33,333	0.92	\$ 2.40	33,333	\$ 2.40
\$ 2.64	8,514	2.79	\$ 2.64	8,514	\$ 2.64
\$ 2.85	63,159	3.79	\$ 2.85	63,159	\$ 2.85
\$ 3.32	3,769	3.27	\$ 3.32	3,769	\$ 3.32
\$ 4.26	16,667	0.32	\$ 4.26	16,667	\$ 4.26
\$ 5.40	115,000	1.92	\$ 5.40	115,000	\$ 5.40
\$ 8.25	313,768	0.67	\$ 8.25	313,768	\$ 8.25
\$ 10.74	1,667	1.10	\$ 10.74	1,667	\$ 10.74
\$ 12.84	1,667	1.60	\$ 12.84	1,667	\$ 12.84
\$ 14.06	387,622	3.80	\$ 14.06	387,622	\$ 14.06
<u>\$ 9.59</u>	<u>945,166</u>	<u>2.35</u>	<u>\$ 9.59</u>	<u>945,166</u>	<u>\$ 9.59</u>

Transactions involving warrants (see Note H) are summarized as follows:

	Number of Shares	Weighted Average Exercise Price Per Share
Balance, October 1, 2012	764,011	\$ 8.70
Granted	2,237,487	13.98
Exercised	(1,003,948)	(10.20)
Cancelled or expired	(1,013,656)	(15.88)
Balance at September 30, 2013	983,894	\$ 11.86
Granted	327,860	8.50
Exercised	(311,587)	(13.44)
Cancelled or expired	(55,001)	(14.00)
Balance, September 30, 2014	<u>945,166</u>	<u>9.59</u>

**APPLIED DNA SCIENCES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
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**NOTE I – STOCK OPTIONS AND WARRANTS, continued**

Employee Stock Options

In 2005, the Board of Directors and the holders of a majority of the outstanding shares of Common Stock approved the 2005 Incentive Stock Plan. In 2007, 2008 and 2012, the Board of Directors and holders of a majority of the outstanding shares of Common Stock approved various increases in the number of shares of Common Stock that can be issued as stock awards and stock options thereunder to an aggregate of 5,833,334 shares and the number of shares of Common Stock that can be covered by awards made to any participant in any calendar year to 833,334 shares.

The 2005 Incentive Stock Plan is designed to retain directors, executives, and selected employees and consultants by rewarding them for making contributions to our success with an award of options to purchase shares of Common Stock. As of September 30, 2014, a total of 211,252 shares have been issued and options to purchase 3,350,780 shares have been granted under the 2005 Incentive Stock Plan.

The following table summarizes the changes in options outstanding and the related prices for the shares of the Company's Common Stock issued to employees of the Company under the 2005 Incentive Stock Plan:

Exercise Prices	Number Outstanding	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number Exercisable	Exercisable Weighted Average Exercise Price
\$ 3.00	400,001	0.65	\$ 3.00	400,001	\$ 3.00
\$ 3.51	666,667	3.79	\$ 3.51	666,667	\$ 3.51
\$ 3.60	333,334	0.76	\$ 3.60	333,335	\$ 3.60
\$ 3.90	10,581	2.18	\$ 3.90	10,581	\$ 3.90
\$ 4.08	79,500	2.17	\$ 4.08	79,500	\$ 4.08
\$ 4.20	47,501	0.88	\$ 4.20	39,376	\$ 4.20
\$ 5.31	120,966	4.04	\$ 5.31	33,334	\$ 5.31
\$ 5.40	16,668	1.92	\$ 5.40	16,668	\$ 5.40
\$ 5.82	946,300	4.05	\$ 5.82	62,964	\$ 5.82
\$ 6.00	8,334	4.97	\$ 6.00	-	\$ -
\$ 6.60	123,338	3.94	\$ 6.60	90,004	\$ 6.60
\$ 6.89	4,167	4.58	\$ 6.89	-	\$ -
\$ 6.96	4,167	4.16	\$ 6.96	-	\$ -
\$ 7.02	33,334	4.18	\$ 7.02	-	\$ -
\$ 8.16	35,446	4.19	\$ 8.16	35,446	\$ 8.16
\$ 9.60	41,667	4.35	\$ 9.60	41,667	\$ 9.60
\$ 10.79	34,991	3.17	\$ 10.79	34,991	\$ 10.79
\$ 11.58	417	3.75	\$ 11.58	417	\$ 11.58
\$ 12.00	1,667	3.63	\$ 12.00	417	\$ 12.00
<u>\$ 4.74</u>	<u>2,909,046</u>	<u>2.99</u>	<u>\$ 4.74</u>	<u>1,845,368</u>	<u>\$ 4.10</u>

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**SEPTEMBER 30, 2014**

**NOTE I – STOCK OPTIONS AND WARRANTS, continued**

Employee Stock Options, continued

Transactions involving stock options issued to employees are summarized as follows:

	Number of Shares	Weighted Average Exercise Price Per Share	Aggregate Intrinsic Value
Outstanding at October 1, 2012	2,086,814	\$ 3.60	
Granted	38,323	10.88	
Exercised	(99,650)	(2.52)	
Cancelled or expired	(1,238)	(3.60)	
Outstanding at September 30, 2013	2,024,249	\$ 3.78	
Granted	1,229,717	6.03	
Exercised	(341,668)	(3.60)	
Cancelled or expired	(3,252)	(7.72)	
Outstanding at September 30, 2014	2,909,046	\$ 4.74	
Vested at September 30, 2014	1,845,368	4.10	\$ 3.36
Non-vested at September 30, 2014	1,063,678		\$ 1.46

The aggregate intrinsic value for options exercised during the fiscal years ended September 30, 2014, 2013 and 2012 was \$3.73, \$8.38 and \$0, respectively.

On November 30, 2012, the Company granted an aggregate of 34,989 options to non-employee board of director members (except Mr. Catenacci) under the 2005 Incentive Stock Plan. The options are exercisable at \$10.79 per share for five years, vesting one year from the date of issuance. The fair value of options was determined using the Black Scholes Option Pricing Model with the following assumptions: dividend yield \$-0-, volatility of 146.33% and risk free rate of 0.82%.

On May 12, 2013, the Company granted an aggregate of 1,667 options to an employee under the 2005 Incentive Stock Plan. The options are exercisable at \$12.00 per share for five years, vesting at 25% each anniversary for the next four years. The fair value of the options was determined using the Black Scholes Option Pricing Model with the following assumptions: dividend yield \$-0-, volatility of 117.57% and risk free rate of 0.60%.

On May 15, 2013 the Company extended the term of 90,000 options that were set to expire to June 16, 2018. The Company recorded \$408,605 of stock compensation expense for the year ended September 30, 2013 in connection with this modification as the incremental difference between fair value of the stock options immediately before and after modification.

On July 2, 2013 the Company granted an aggregate of 1,667 options to an employee under the 2005 Incentive Stock Plan. The options are exercisable at \$11.58 per share for five years, vesting at 25% each anniversary for the next four years. The fair value of the options was determined using the Black Scholes Option Pricing Model with the following assumptions: dividend yield \$-0-, volatility of 114% and risk free interest rate of 1.01%.

On October 14, 2013, the Company granted an aggregate of 122,987 options to purchase the Company's Common Stock at an exercise price of \$5.32 per share for five years to employees. 89,617 of these options vest at 25% each anniversary for the next four years and 33,333 of these options vest immediately.

On October 17, 2013, the Company granted Dr. James A. Hayward, Chairman, CEO and President and Dr. Ming-Hwa Liang, Chief Technology Officer and Secretary of the Company options to purchase 833,333 and 50,000 shares of the Company's Common Stock, respectively, at an exercise price of \$5.82 per share for five years with vesting at 25% each anniversary for the next four years. Also on October 17, 2013, the Company granted an aggregate of 62,963 options to non-employee board of director members at an exercise price of \$5.82 per share for five years with immediate vesting.

On November 28, 2013, the Company granted 4,167 options to purchase the Company's Common Stock at an exercise price of \$6.96 per share for five years to an employee with vesting at 25% each anniversary for the next four years.

On December 2, 2013, the Company granted 33,333 options to purchase the Company's Common Stock at an exercise price of \$7.02 per share for five years to an employee with vesting at 25% each anniversary for the next four years.

**APPLIED DNA SCIENCES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**SEPTEMBER 30, 2014**

**NOTE I – STOCK OPTIONS AND WARRANTS, continued**

Employee Stock Options, continued

On December 10, 2013, the Company granted an aggregate of 35,433 options to purchase the Company's Common Stock at an exercise price of \$8.16 per share for five years to employees, with immediate vesting.

On February 6, 2014, the Company granted 41,667 options to purchase the Company's Common Stock at an exercise price of \$9.60 per share for five years to a consultant, with immediate vesting.

On February 23, 2014 the Company extended the term of 16,667 options that were set to expire on that date. The Company recorded \$43,401 of stock compensation expense for the fiscal year ended September 30, 2014 in connection with this modification as the incremental difference between the fair value of the stock options immediately before and after the modification.

On April 14, 2014, the Company granted 33,333 options to purchase the Company's Common Stock at an exercise price of \$6.60 per share for five years to an employee with vesting at 25% each anniversary for the next four years.

On May 1, 2014, the Company granted 4,167 options to purchase the Company's Common Stock at an exercise price of \$6.89 per share for five years to an employee with vesting at 25% each anniversary for the next four years.

On August 5, 2014 the Company modified the vesting term of 33,334 options. The Company recorded \$25,887 of stock compensation expense for the fiscal year ended September 30, 2014 in connection with this modification as the incremental difference between the fair value of the stock options immediately before and after the modification.

On September 20, 2014 the Company granted 8,334 options to purchase the Company's Common Stock at an exercise price of \$6.00 per share for five years to an employee, which vest immediately.

The fair value of options granted during the fiscal year ended September 30, 2014 was determined using the Black Scholes Option Pricing Model. For the purposes of the valuation model, the Company used the simplified method for determining the granted options expected lives. The simplified method is used since the Company does not have adequate historical data to utilize in calculating the expected term of options. The fair value for options granted was calculated using the following weighted average assumptions:

	<b>2014</b>	<b>2013</b>	<b>2012</b>
Stock price	\$ 6.11	\$ 14.36	\$ 3.90
Exercise price	\$ 6.12	\$ 7.88	3.90
Expected term	3.62	4.97	5.00
Dividend yield	0.00	0.00	0.00
Volatility	112%	136%	155%
Risk free rate	0.97%	0.83%	0.95%

The Company recorded \$2,033,341 (including stock option modification), \$1,926,129 (including stock option modification) and \$1,953,844 as stock compensation expense for fiscal years ended September 30, 2014, 2013 and 2012 respectively. As of September 30, 2014, unrecorded compensation cost related to non-vested awards was \$3,429,056, which is expected to be recognized over a weighted average period of approximately 3.05 years. The weighted average grant date fair value for options granted during the fiscal years ended September 30, 2014, 2013 and 2012 was \$2,573,321, \$1,008,744 and \$30,328, respectively.



**APPLIED DNA SCIENCES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**SEPTEMBER 30, 2014**

**NOTE J – INCOME TAXES**

The income tax provision (benefit) for the years ended September 30, 2014, 2013 and 2012 consists of the following:

	<u>2014</u>	<u>2013</u>	<u>2012</u>
Federal:			
Current	\$ -	-	\$ -
Deferred	643,000	2,955,000	1,422,000
	<u>643,000</u>	<u>2,955,000</u>	<u>1,422,000</u>
State and local:			
Current	-	-	-
Deferred	13,000	407,000	196,000
	<u>13,000</u>	<u>407,000</u>	<u>196,000</u>
Valuation allowance	(656,000)	(3,362,000)	(1,618,000)
Income tax provision (benefit)	<u>\$ -</u>	<u>-</u>	<u>\$ -</u>

The provision for income taxes differ from the amount of income tax determined by applying the applicable U.S. statutory rate to losses before income tax expense for the years ended September 30, 2014, 2013 and 2012 as follows:

	<u>2014</u>	<u>September 30, 2013</u>	<u>2012</u>
Statutory federal income tax rate	34.00%	34.00%	34.00%
Statutory state and local income tax rate (1%, 7.1% and 7.1% as of September 30, 2014, 2013 and 2012, respectively), net of federal benefit	0.66%	4.69%	4.69%
Stock based compensation	0.00%	(3.27%)	(10.74%)
Other	(0.05%)	0.12%	0.28%
Amortization of debt discount	0.00%	0.00%	(2.92%)
Change in valuation allowance	(34.61%)	(35.54%)	(25.31%)
Effective tax rate	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>

**APPLIED DNA SCIENCES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**SEPTEMBER 30, 2014**

**NOTE J – INCOME TAXES, continued**

Deferred income taxes result from temporary differences in the recognition of income and expenses for financial reporting purposes and for tax purposes. The tax effect of these temporary differences representing deferred tax asset and liabilities result principally from the following:

	September 30,	
	2014	2013
Deferred tax assets (liabilities):		
Stock based compensation	\$ 5,619,000	\$ 5,486,000
Depreciation and amortization	1,733,000	1,977,000
Impairment of intangibles	40,000	44,000
Amortization of debt discount	15,822,000	17,662,000
Warrant liability	2,917,000	2,905,000
Net operating loss carry forward	14,326,000	11,728,000
Less: valuation allowance	(40,457,000)	(39,802,000)
Net deferred tax asset	<u>\$ -</u>	<u>\$ -</u>

As of September 30, 2014, the Company has approximately \$41,482,000 of Federal and \$33,626,000 of State net operating loss “NOL” carryforwards available which begin to expire after 2022. Pursuant to Internal Revenue Code Section 382, the Company’s ability to utilize the NOLs is subject to certain limitations due to changes in stock ownership in prior years. The annual limitation ranges between \$786,000 and \$948,000 and any unused amounts can be carried forward to subsequent years.

The Company has provided a full valuation allowance against all of the net deferred tax assets based on management’s determination that it is more likely than not that the net deferred tax assets will not be realized in the future.

Based on a study of Section 382 of the Internal Revenue code conducted by the Company at September 30, 2014, deferred tax asset related to net operating loss carryforward is decreased by \$6,185,000 at September 30, 2013. Additionally, deferred tax asset at September 30, 2013 have been revised as follows: deferred tax asset related to stock based compensation is increased by \$4,908,000; deferred tax asset related to depreciation and amortization is increased by \$1,998,000; deferred tax asset related to impairment of intangibles is increased by \$44,000; deferred tax asset related to amortization of debt discounts is increased by \$17,662,000; deferred tax asset related to warrant liability is increased by \$2,905,000; the valuation allowance is increased by \$21,332,000, completely offsetting the net increases in the deferred tax assets. The revisions resulted in no change to the net tax provision of the Company at September 30, 2013 and for the fiscal year ended.

**NOTE K – COMMITMENTS AND CONTINGENCIES**

Operating leases

The Company leases office space under an operating lease in Stony Brook, New York for its corporate headquarters. The lease is for a 30,000 square foot building. The term of the lease commenced on June 15, 2013 and expires on May 31, 2016, with the option to extend the lease for two additional three-year periods. The base rent during the initial lease term is \$449,142 per annum. The Company also has operating leases for a laboratory in Huddersfield, England, which is currently inactive and Calverton, New York. The Huddersfield lease is currently on month to month. The Calverton lease is from February 1, 2014 through October 31, 2014, with the option to renew for additional one year periods. The Calverton lease is currently month to month. The base rent during the initial lease term is \$2,850 per year. Total rent expense for the years ended September 30, 2014, 2013 and 2012 were \$505,520, \$352,867 and \$244,192, respectively.

Future minimum rental payments (excluding real estate tax and maintenance costs) as of September 30, 2014 are as follows:

2015	\$ 468,548
2016	300,803
Total	<u>\$ 769,351</u>

APPLIED DNA SCIENCES, INC.  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
SEPTEMBER 30, 2014

**NOTE K – COMMITMENTS AND CONTINGENCIES, continued**

Employment and Consulting Agreements

*Employment agreements*

On July 11, 2011, the Company's Board of Directors approved the terms of employment for Dr. James A. Hayward, the Company's Chief Executive Officer ("CEO").

The agreement provides that Dr. Hayward will be our Chief Executive Officer, and will continue to serve on the Company's Board of Directors. The initial term of his employment was from July 1, 2011 through June 30, 2014, which automatically renews for one-year periods subject to ninety days' prior notice of non-renewal by either party. Dr. Hayward's employment agreement was automatically renewed for one year. Dr. Hayward received an initial annual salary of \$225,000, subject to annual review. On November 30, 2012, the Company's Board of Directors increased Dr. Hayward's annual salary to \$350,000. The agreement provided that Dr. Hayward's annual salary will be increased to \$350,000 per annum after the first quarter in which the Company's revenues exceed \$1 million for such quarter. The Board of Directors, acting in its discretion, may grant annual bonuses to Dr. Hayward. Dr. Hayward will be eligible for a special cash bonus of up to \$750,000, 40% of which will be payable if and when annual revenue reaches \$6 million and 10% of which would be payable for each \$2 million of annual revenue in excess of \$6 million. On November 30, 2012, the Board granted a cash bonus of \$150,000 to Dr. Hayward payable upon the closing of an additional financing of \$5.5 million by an investor. Dr. Hayward will be entitled to certain benefits and perquisites and will be eligible to participate in retirement, welfare and incentive plans available to our other employees.

Dr. Hayward was granted options to purchase 666,667 shares of our common stock at an exercise price per share equal to \$3.51. The options vested as follows: 25% on the grant date, and 37.5% on each of the next two anniversaries of the grant date, subject to Dr. Hayward's continuous employment. If the Company's revenues for any fiscal quarter increased by more than \$1 million over the prior fiscal quarter, then the vesting date for the next 37.5% tranche would be accelerated. The Company also granted 250,000 shares of its common stock to Dr. Hayward.

The agreement with Dr. Hayward also provides that if he is terminated before the end of the initial or a renewal term by the Company without cause or if Dr. Hayward terminates his employment for good reason, then, in addition to previously earned and unpaid salary, bonus and benefits, and subject to the delivery of a general release and continuing compliance with restrictive covenants, Dr. Hayward will be entitled to receive a pro rata portion of the annual bonus he would have received if employment had continued through the end of the year of termination; salary continuation payments for two years following termination equal to the greater of (i) three times base salary or (ii) two times base salary plus bonus; Company-paid COBRA continuation coverage; continuing life insurance benefits (if any) for two years; and extended exercisability of outstanding vested options (for three years from termination date or, if earlier, the expiration of the fixed option term). If termination of employment as described above occurs within six months before or two years after a change in control of the Company, then, in addition to the above payments and benefits, all of Dr. Hayward's outstanding options and other equity incentive awards will become fully vested and Dr. Hayward will receive a lump sum payment of the amounts that would otherwise be paid as salary continuation. In general, a change in control will include a 30% or more change in ownership of the Company.

Upon termination due to death or disability, Dr. Hayward will generally be entitled to receive the same payments and benefits he would have received if his employment had been terminated by the Company without cause (as described in the preceding paragraph), other than salary continuation payments.

Effective June 21, 2014, Dr. Hayward's annual salary was voluntarily reduced by \$50,000. This salary reduction will be accrued and repaid when the Company reaches \$3,000,000 in sales for two consecutive quarters or the Company has net income at the end of any fiscal year.

**APPLIED DNA SCIENCES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**SEPTEMBER 30, 2014**

**NOTE K – COMMITMENTS AND CONTINGENCIES, continued**

Litigation

From time to time, the Company may become involved in various lawsuits and legal proceedings which arise in the ordinary course of business. When the Company is aware of a claim or potential claim, it assesses the likelihood of any loss or exposure. If it is probable that a loss will result and the amount of the loss can be reasonably estimated, the Company will record a liability for the loss. In addition to the estimated loss, the recorded liability includes probable and estimable legal costs associated with the claim or potential claim. Litigation is subject to inherent uncertainties, and an adverse result in these or other matters may arise from time to time that may harm the Company's business.

*SmartWater, Ltd. v. Applied DNA Sciences, Inc.* (Civil Action No. 12-05731-JS-AKT, Eastern District of New York)

On August 24, 2012, SmartWater Limited ("SmartWater") filed a complaint for patent infringement against the Company in the United States District Court for the Southern District of Florida. It alleged that the Company infringed two of SmartWater's patents. Upon the Company's motion, the case was transferred to the United States District Court for the Eastern District of New York. On June 26, 2013, SmartWater moved for leave to file an amended complaint. By memorandum and order dated September 27, 2013, the Court held that SmartWater had adequately stated claims for direct infringement, but dismissed the claims for contributory infringement with respect to both patents and induced infringement with respect to one patent.

On June 11, 2014, SmartWater filed a motion for an order dismissing its remaining patent infringement claims against the Company with prejudice. On July 18, 2014, the Company filed a request for an award of attorneys' fees. On September 29, 2014, the Court dismissed SmartWater's claims with prejudice and denied the Company's request for attorneys' fees. As part of the dismissal, the Court ordered that SmartWater is permanently barred from suing the Company or any other entity with respect to the patents at issue as they relate to the Company's products or services. SmartWater recovered nothing from the Company as a result of its suit.

**NOTE L – FAIR VALUE**

The carrying value of cash, accounts receivable, accounts payable and accrued expenses approximate estimated fair values because of their short maturities.

The carrying value of the warrant liability is determined using the Binomial Lattice model option pricing model as described in Note B. Certain assumptions used in the calculation of the warrants liability represent level-3 unobservable inputs. The Company did not have any assets or liabilities categorized as Level 1 or 2 as of September 30, 2014.

**APPLIED DNA SCIENCES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**SEPTEMBER 30, 2014**

**NOTE L – FAIR VALUE, continued**

The following table summarizes the activity of Level 3 inputs measured on a recurring basis:

Fair Value Measurements of Common Stock Warrants Using Significant Unobservable Inputs (Level 3)

**Fair Value Measurements of Derivative Warrant Liability Using Significant Unobservable Inputs (Level 3)**

	<b>Year Ended September 30,</b>	
	<b>2014</b>	<b>2013</b>
Balance at October 1,	\$ 2,643,449	\$ —
Issuance of Series A and B Warrants	—	2,461,856
Adjustment resulting from change in value recognized in earnings (a)	908,005	7,508,146
Reclassification to equity upon exercise	(2,455,042)	(7,326,553)
Balance at September 30,	<u>\$ 1,096,412</u>	<u>\$ 2,643,449</u>

(a) *Adjustment resulting from change in fair value* is the amount of total gains or losses for the period attributable to the change in unrealized gains or losses relating to liabilities held at the reporting date and realized gains or losses at the date of exercise. The gain or loss is recorded in change in fair value of warrant liability in the accompanying consolidated statements of operations.

**NOTE M – SUBSEQUENT EVENTS**

On November 20, 2014, the Company closed its underwritten public offering of 2,800,000 shares of common stock and warrants to purchase up to an aggregate of 2,800,000 shares of Common Stock for gross proceeds of \$9.1 million before deducting underwriting discounts and offering expenses. The Company utilized \$4,091,000 of the gross proceeds to repurchase the remaining Series B Warrants from Crede, as discussed in Note F. The public offering price for each share of Common Stock and each warrant was \$3.25. The warrants may be exercised for a period of five years and have a per share exercise price of \$3.50 per share of Common Stock. In connection with the offering, the Company granted to the underwriters a 45-day option to purchase up to 420,000 additional shares of Common Stock and/or up to 420,000 additional warrants to cover over-allotments, if any. The Company's Chief Executive Officer and an affiliate of a member of the Company's board of directors participated in this underwritten public offering. The Company's Common Stock and warrants are listed on the Nasdaq Capital Market under the symbols "APDN" and "APDNW", respectively. In addition, the Company agreed to issue to the underwriters warrants to purchase 128,800 shares of common stock at an exercise price of \$3.73 per share. The Company had approximately \$1,212,000 of deferred offering costs as of December 15, 2014.

In connection with the closing of the offering, the Company entered into a Warrant Agreement with American Stock Transfer & Trust Company, LLC, as warrant agent ("Warrant Agreement"), pursuant to which American Stock Transfer & Trust Company, LLC has agreed to act as transfer agent with respect to the warrants for the Company. A copy of the Warrant Agreement is filed as Exhibit 4.1 and is incorporated herein by reference.

On November 20, 2014 the Company granted 83,334 options to purchase the Company's Common Stock at an exercise price of \$2.69 per share for five years to a consultant, which vest immediately.

On December 3, 2014, Joseph Ceccoli was appointed to the Company's Board of Directors.

**Supplementary Financial Information**

The following quarterly data are derived from the Company's consolidated statements of operations.

**QUARTERLY INFORMATION (unaudited)**

	<b>Quarter Ended September 30, 2014</b>	<b>Quarter Ended June 30, 2014</b>	<b>Quarter Ended March 31, 2014</b>	<b>Quarter Ended December 31, 2013</b>	<b>Year Ended September 30, 2014</b>
<b>Fiscal 2014</b>					
Net sales	\$ 645,527	\$ 841,197	\$ 637,146	\$ 597,354	\$ 2,721,224
Loss from operations	\$ (2,844,603)	\$ (2,487,010)	\$ (3,127,185)	\$ (3,812,743)	\$ (12,271,541)
Net loss	\$ (2,105,518)	\$ (1,919,057)	\$ (2,750,436)	\$ (6,291,650)	\$ (13,066,661)
Loss per share-basic and diluted	\$ (0.16)	\$ (0.14)	\$ (0.20)	\$ (0.48)	\$ (0.97)
	<b>Quarter Ended September 30, 2013</b>	<b>Quarter Ended June 30, 2013</b>	<b>Quarter Ended March 31, 2013</b>	<b>Quarter Ended December 31, 2012</b>	<b>Year Ended September 30, 2013</b>
<b>Fiscal 2013</b>					
Net sales	\$ 729,105	\$ 644,842	\$ 344,605	\$ 317,670	\$ 2,036,222
Loss from operations	\$ (2,352,328)	\$ (2,843,234)	\$ (2,608,117)	\$ (2,372,158)	\$ (10,175,837)
Net loss	\$ (3,718,472)	\$ (2,135,612)	\$ (3,127,631)	\$ (8,704,757)	\$ (17,686,472)
Loss per share-basic and diluted	\$ (0.29)	\$ (0.18)	\$ (0.28)	\$ (0.60)	\$ (1.51)

## 2,800,000 Shares of Common Stock and

## 2,800,000 Warrants to Purchase Shares of Common Stock

APPLIED DNA SCIENCES, INC.

UNDERWRITING AGREEMENT

November 17, 2014

Maxim Group LLC  
405 Lexington Avenue  
New York, NY 10174

*Acting severally on behalf of itself  
and as representative of the several Underwriters  
named on **Schedule I** annexed hereto.*

Ladies and Gentlemen:

Applied DNA Sciences, Inc., a Delaware corporation (the "**Company**"), proposes, subject to the terms and conditions contained herein, (this "**Agreement**"), to sell to you and the other underwriters named on **Schedule I** to this Agreement (the "**Underwriters**"), for whom Maxim Group LLC ("**Maxim**") is acting as Representative (the "**Representative**," "**you**" or similar terminology), an aggregate of 2,800,000 shares of the Company's common stock, \$0.001 par value per share (the "**Common Stock**"), and 2,800,000 warrants (the "**Warrants**") with the right to purchase one share of Common Stock (together, "**Securities**"). The respective numbers of Securities to be purchased by each of the several Underwriters are set forth opposite their names on **Schedule I** hereto. In addition, the Company proposes to grant to the Underwriters an option to purchase up to an additional 420,000 shares of Common Stock (the "**Option Shares**") and/or up to an additional 420,000 Warrants (the "**Option Warrants**") from the Company for the purpose of covering over-allotments in connection with the sale of the Securities (collectively, the "**Option Securities**"). The Securities and the Option Securities are collectively referred to herein as the "**Transaction Securities**."

The Company has prepared and filed in conformity with the requirements of the Securities Act of 1933, as amended (the "**Securities Act**"), and the published rules and regulations thereunder (the "**Rules**") adopted by the Securities and Exchange Commission (the "**Commission**"), a Registration Statement (as hereinafter defined) on Form S-1 (No. 333-199121), including a preliminary prospectus relating to Securities, and such amendments thereof, and the 462(b) Registration Statement (defined below), as may have been required to the date of this Agreement. Copies of such Registration Statement (including all amendments thereof), the 462(b) Registration Statement, and of the related Preliminary Prospectus (as hereinafter defined) have heretofore been delivered by the Company to you. The term "**Preliminary Prospectus**" means any preliminary prospectus included at any time as a part of the Registration Statement or filed with the Commission by the Company pursuant to Rule 424(a) of the Rules. The term "**Registration Statement**" as used in this Agreement means the initial registration statement (including all exhibits, financial schedules and all documents and information deemed to be a part of the Registration Statement through incorporation by reference or otherwise), as amended at the time and on the date it is declared effective by the Commission (the "**Effective Date**"), including the information (if any) contained in the form of final prospectus filed with the Commission pursuant to Rule 424(b) of the Rules and deemed to be part thereof at the time of effectiveness pursuant to Rule 430A of the Rules. If the Company has filed an abbreviated registration statement to register additional Securities pursuant to Rule 462(b) under the Rules (the "**462(b) Registration Statement**"), then any reference herein to the Registration Statement shall also be deemed to include such 462(b) Registration Statement. The term "**Prospectus**" as used in this Agreement means the prospectus in the form included in the Registration Statement at the time of effectiveness or, if Rule 430A of the Rules is relied on, the term Prospectus shall also include the final prospectus filed with the Commission pursuant to and within the time limits described in Rule 424(b) of the Rules.

The Company understands that the Underwriters propose to make a public offering of Securities (the "**Offering**"), as set forth in and pursuant to the Statutory Prospectus (as hereinafter defined) and the Prospectus, as soon after the Effective Date and the date of this Agreement as the Representative deems advisable. The Company hereby confirms that the Underwriters and dealers have been authorized to distribute or cause to be distributed each Preliminary Prospectus, and each Issuer Free Writing Prospectus, if any (as hereinafter defined) and are authorized to distribute the Prospectus (as from time to time amended or supplemented if the Company furnishes amendments or supplements thereto to the Underwriters).

1. **Sale, Purchase, Delivery and Payment for Securities.** On the basis of the representations, warranties and agreements contained in, and subject to the terms and conditions of, this Agreement:

(a) The Company agrees to issue and sell to each of the Underwriters, and each of the Underwriters agrees, severally and not jointly, to purchase from the Company, at a purchase price of \$3.0374 per Security (the "**Initial Price**"), representing a 7% discounted price from the price the Underwriters shall sell Securities to the public, the number of Securities set forth opposite the name of such Underwriter under the column "Number of Securities to be Purchased" on **Schedule I** to this Agreement, subject to adjustment in accordance with Section 8 hereof.

(b) The Company hereby grants to the several Underwriters an option to purchase, severally and not jointly, all or any part of the Option Shares at a price per share equal to the Initial Price less \$0.01, and all or any part of the Option Warrants at \$0.01 per warrant. The number of Option Securities to be purchased from time to time by each Underwriter shall in the aggregate together with such prior purchases not exceed the same percentage (adjusted by the Representative to eliminate fractions) of the total number of Option Securities to be purchased by the Underwriters as such Underwriter is purchasing of Securities. Such option may be exercised only to cover over-allotments in the sales of Securities by the Underwriters and may be exercised in whole or in part at any time on or before 12:00 noon, Eastern Standard Time ("**EST**"), on the business day before Securities Closing Date (as defined below), and from time to time thereafter within 45 days after the date of this Agreement, in each case upon written, facsimile or telegraphic notice, or verbal or telephonic notice confirmed by written or facsimile notice, by the Representative to the Company no later than 12:00 noon, EST, on the business day before Securities Closing Date or at least one business day before the Option Securities Closing Date (as defined below), as the case may be, setting forth the number of Option Shares and Option Warrants to be purchased and the time and date (if other than Securities Closing Date) of such purchase.

(c) Upon the successful closing of the Offering, for a period of six (6) months from the Securities Closing Date (as defined below), the Company, any subsidiary of the Company or any successor to the Company grants the Representative the right of first refusal to manage or co-manage any public underwriting or private placement of debt or equity securities (the "**ROFR**"). The ROFR will not apply to the following transactions: (i) sales to employees under any compensation or stock option plan approved by the shareholders of the Company; (ii) shares issued as consideration in an acquisition or as part of a joint venture or other bona fide strategic relationship (the primary purpose of which is not to raise capital); and (iii) conventional banking arrangements and commercial debt financing. If the Representative fails to accept in writing any such proposal for such public or private sale within twenty (20) days after receipt of a written notice from the Company containing such proposal, then the Representative will have no claim or right with respect to any such sale contained in any such notice. If thereafter, such proposal is modified in any material respect, the Representative will have the right of first refusal with respect to such revised proposal following the same procedures described above for acceptance.



(d) Payment of the purchase price for, and delivery of the Securities as provided for in Section 1(e) hereof, shall be made at the offices of Maxim Group LLC, 405 Lexington Avenue, New York, NY 10174 or at such other place as shall be agreed upon by the Representative and the Company, at 10:00 a.m., EST, on the third (or if Securities are priced, as contemplated by Rule 15c6-1(c) under the Securities and Exchange Act of 1934, as amended (the "**Exchange Act**"), after 4:30 p.m. EST, fourth) business day following the date of this Agreement (such time and date of delivery and payment are called the "**Securities Closing Date**"). In addition, in the event that any or all of the Option Securities are purchased by the Underwriters, payment of the purchase price, and delivery of such Option Securities shall be made at the above-mentioned offices, or at such other place as shall be agreed upon by the Representative and the Company, on each date of delivery as specified in the notice from the Representative to the Company (such time and date of delivery and payment are called the "**Option Securities Closing Date**"). Securities Closing Date and any Option Securities Closing Date are called, individually, a "**Closing Date**" and, together, the "**Closing Dates**."

(e) Payment shall be made to the Company by wire transfer of immediately available funds or by certified or official bank check or checks payable in New York Clearing House (same day) funds drawn to the order of the Company against delivery of the securities comprising Securities to the Representative for the respective accounts of the Underwriters of Securities to be purchased by them.

(f) If certificates evidencing the Securities are requested by the Representative for delivery on a Closing Date, such certificates shall be registered in such names and shall be in such denominations as the Representative shall request in writing at least two full business days before Securities Closing Date or, in the case of Option Securities, on the day of notice of exercise of the option as described in Section 1(a). If no certificates are so requested, the Securities shall be delivered on each Closing Date by or on behalf of the Company to the Representative through the facilities of the Depository Trust Company ("**DTC**") for the account of each Underwriter. If certificates are so requested, the Company will cause the certificates representing the Securities to be made available for checking and packaging, at such place as is designated by the Representative, on the full business day before Securities Closing Date (or the Option Securities Closing Date in the case of the Option Securities).

(g) The Company hereby agrees to issue to the Representative (and/or its respective designees) on the Closing Date, Warrants to purchase up to an aggregate of 128,800 shares of Common Stock (the "**Representative's Warrants**"), which represents the number of shares of Common Stock equal to four percent (4.0%) of the total number of shares of Common Stock sold in the Offering, including the Option Shares. The Representative's Warrants shall be exercisable, in whole or in part, commencing 180 days from the Effective Date and expiring on the five-year anniversary of the Effective Date at an initial exercise price of \$3.73 per share of Common Stock, which is equal to one hundred and fifteen percent (115%) of the initial public offering price of the Securities.

2. **Representations and Warranties of the Company.** The Company represents and warrants to each Underwriter as of the date hereof, as of Securities Closing Date and as of each Option Securities Closing Date (if any), as follows:

(a) On the Effective Date, the Registration Statement complied, and on the date of the Prospectus, the date any post-effective amendment to the Registration Statement becomes effective, the date any supplement or amendment to the Prospectus is filed with the Commission and each Closing Date, the Registration Statement, the Prospectus (and any amendment thereof or supplement thereto) will comply, in all material respects, with the requirements of the Securities Act and the Rules and the Exchange Act and the rules and regulations of the Commission thereunder. At the Effective Date, at the date hereof and at the Closing Date, the Registration Statement and any post-effective amendment did not and will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. Each of (i) the General Disclosure Package (as defined below) as of the Applicable Time and at the Closing Date and on each Option Closing Date, and (ii) the Prospectus, as amended or supplemented, as of its date, at the time of filing pursuant to Rule 424(b) under the Securities Act and at the Closing Date and on each Option Closing Date, if any, did not and will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading. Notwithstanding the foregoing, none of the representations and warranties set forth above in this Paragraph 2(a) shall apply to statements in, or omissions from, the Registration Statement, any Preliminary Prospectus or the Prospectus made in reliance upon, and in conformity with, information herein or otherwise furnished in writing by the Representative on behalf of the several Underwriters specifically for use in the Registration Statement, any Preliminary Prospectus or the Prospectus, as the case may be. With respect to the preceding sentence, the Company acknowledges that the only information furnished in writing by the Representative on behalf of the several Underwriters for use in the Registration Statement, any Preliminary Prospectus or the Prospectus consists solely of the disclosure contained in the "Underwriting" section of the Prospectus (the "**Underwriter Information**"). Each Preliminary Prospectus delivered to the Underwriters for use in connection with the Offering and the Prospectus was or will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T. The Prospectus, any Preliminary Prospectus and any supplement thereto or prospectus wrapper prepared in connection therewith, at their respective times of issuance and at the Closing Date, complied and will comply in all material respects with any applicable laws or regulations of foreign jurisdictions in which the Prospectus and such Preliminary Prospectus, as amended or supplemented, if applicable, are distributed in connection with the offer and sale of Securities.

As used in this Section and elsewhere in this Agreement:

"**Applicable Time**" means 10:00 a.m. (Eastern time) on the date of this Underwriting Agreement.

"**General Disclosure Package**" means the Statutory Prospectus, the prospectus contained in the Registration Statement, and each Issuer Free Writing Prospectus.

"**Marketing Materials**" means any electronic road show or investor presentation (including without limitation any "bona fide electronic road show" as defined in Rule 433(h)(5) under the Securities Act) delivered to and approved by the Underwriters for use in connection with the marketing of the Offering.

"**Statutory Prospectus**" as of any time means the Preliminary Prospectus relating to Securities that is included in the Registration Statement immediately prior to the Applicable Time.

"**Issuer Free Writing Prospectus**" means each "**free writing prospectus**" (as defined in Rule 405 of the Rules) prepared by or on behalf of the Company or used or referred to by the Company in connection with the Offering.

(b) Other than the Registration Statement, the Preliminary Prospectus and the Prospectus, the Company has not prepared, used, authorized, approved or referred to – and will not prepare, use, authorize, approve or refer to – any "**written communication**" (as defined in Rule 405 under the Securities Act) that constitutes an offer to sell or solicitation of an offer to buy Securities other than (i) any document not constituting a prospectus pursuant to Section 2(a)(10)(a) of the Securities Act or Rule 134 under the Securities Act or (ii) the documents listed on **Schedule II** hereto, each electronic road show and any other written communications approved in writing in advance by the Representative.

(c) The Registration Statement is effective under the Securities Act and no stop order preventing or suspending the effectiveness of the Registration Statement or suspending or preventing the use of any Preliminary Prospectus, the Prospectus or any "free writing prospectus", as defined in Rule 405 under the Rules, has been issued by the Commission and, to the knowledge of the Company, no proceedings for that purpose have been instituted or are threatened under the Securities Act. Any required filing of any Preliminary Prospectus and/or the Prospectus and any supplement thereto pursuant to Rule 424(b) of the Rules has been or will be made in the manner and within the time period required by such Rule 424(b). Any material required to be filed by the Company pursuant to Rule 433(d) or Rule 163(b)(2) of the Rules has been or will be made in the manner and within the time period required by such Rules.

(d) Each Issuer Free Writing Prospectus, as of its issue date and at all subsequent times through the completion of the public offer and sale of Securities or until any earlier date that the Company notified or notifies the Representative as described in the next sentence, did not, does not and will not include any information that conflicted, conflicts or will conflict in any material respect, with the information contained in the Registration Statement, the General Disclosure Package or the Prospectus.

If at any time following issuance of an Issuer Free Writing Prospectus there occurred or occurs an event or development as a result of which such Issuer Free Writing Prospectus conflicted or would conflict in any material respect with the information contained in the Registration Statement, the General Disclosure Package or the Prospectus or included or would include an untrue statement of a material fact or omitted or would omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances prevailing at the subsequent time, not misleading, the Company has promptly notified or will promptly notify the Representative and has promptly amended or will promptly amend or supplement, at its own expense, such Issuer Free Writing Prospectus to eliminate or correct such conflict, untrue statement or omission.

(e) The financial statements of the Company (including all notes and schedules thereto) included in the Registration Statement, the General Disclosure Package and Prospectus present fairly the financial position of such entities and their subsidiaries, if any, at the dates indicated and the statement of operations, stockholders' equity and cash flows of, or such other permitted financial statements for, such entities and their subsidiaries, if any, for the periods specified, and related schedules and notes thereto, and the unaudited financial information filed with the Commission as part of the Registration Statement, have been prepared in conformity with generally accepted accounting principles, consistently applied throughout the periods involved, except in the case of unaudited financials which are subject to normal year-end adjustments and do not contain certain footnotes. Any pro forma financial statements and the related notes thereto included in the Registration Statement, the General Disclosure Package and the Prospectus present fairly the information shown therein, have been prepared in all material respects in accordance with the Commission's rules and guidelines with respect to pro forma financial statements and have been properly compiled on the bases described therein, and subject to such rules and guidelines, the Company believes the assumptions used in the preparation thereof are reasonable and the adjustments used therein are appropriate to give effect to the transactions and circumstances referred to therein. Except as included therein, no historical or pro forma financial statements or supporting schedules are required to be included or incorporated by reference in the Registration Statement, the General Disclosure Package or the Prospectus under the Securities Act or the Rules promulgated thereunder.

(f) RBSM LLP (the "**Auditor**") whose reports are filed with the Commission as a part of the Registration Statement, are and, during the periods covered by their reports, were, to the knowledge of the Company, independent public accountants as required by the Securities Act, the Rules and the rules and regulations of the Public Accounting Oversight Board.

(g) The interactive data in eXtensible Business Reporting Language included in the Registration Statement fairly presents the information called for in all material respects and has been prepared in accordance with the Commission's rules and guidelines applicable thereto.

(h) The Company has been duly organized and is validly existing as a corporation in good standing under the laws of the State of Delaware and has corporate power and authority to own, lease, and operate its properties and to conduct its business as described in the Registration Statement, the General Disclosure Package and the Prospectus and to enter into and perform its obligations under this Agreement and the various other agreements required hereunder and thereunder to which it is a party; and the Company is duly qualified as a foreign corporation to transact business and is in good standing in each other jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except for such jurisdictions where the failure to so qualify individually or in the aggregate would not have a material adverse effect on the assets, properties, condition, financial or otherwise, or in the results of operations, business affairs or business prospects (as described in the Registration Statement, the General Disclosure Package and the Prospectus) of the Company and its subsidiaries considered as a whole (a "**Material Adverse Effect**").

(i) Each subsidiary of the Company has been duly organized and is validly existing in good standing under the laws of the jurisdiction of its incorporation or organization, has corporate or similar power and authority to own, lease and operate its properties and to conduct its business as described in the Registration Statement, the General Disclosure Package and the Prospectus and is duly qualified to transact business and is in good standing in each jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure to so qualify would not have a Material Adverse Effect. Except as otherwise disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, all of the issued and outstanding capital stock or equity interests of each subsidiary has been duly authorized and validly issued, is fully paid and non-assessable and is owned by the Company, directly or through subsidiaries, free and clear of any material security interest, mortgage, pledge, lien, encumbrance, claim or equity. None of the outstanding shares of capital stock or equity interests of any subsidiary was issued in violation of the preemptive or similar rights of any securityholder of such subsidiary.

(j) The authorized, issued and outstanding shares of capital stock of the Company are as set forth in the Registration Statement, the General Disclosure Package and the Prospectus under the caption "Description of Securities." The outstanding shares of capital stock of the Company have been duly authorized and validly issued and are fully paid and non-assessable. None of the outstanding shares of capital stock of the Company was issued in violation of the preemptive or other similar rights of any securityholder of the Company. Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus: other than with respect to (x) any shares reserved pursuant to the Company's equity incentive plan as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, and (y) the Common Stock underlying the warrants described in the Prospectus, (i) no shares of capital stock of the Company are reserved for any purpose, (ii) no outstanding securities are convertible into or exchangeable for any shares of capital stock of the Company, and (iii) there are no outstanding options, rights (preemptive or otherwise) or warrants to purchase or subscribe for shares of capital stock or any other securities of the Company.

(k) All necessary corporate action has been duly and validly taken by the Company to authorize the execution, delivery and performance of this Agreement, the Warrants and the Representative's Warrant and the issuance and sale of the Securities and the Common Stock underlying the Warrants and the Representative's Warrant by the Company. This Agreement has been duly authorized, executed and delivered by the Company and the Warrant and Representative's Warrant, upon issuance, will have been duly authorized, executed and delivered by the Company.

(l) When issued, the Representative's Warrants and the Warrants will constitute valid and binding obligations of the Company to issue and sell, upon exercise thereof and payment of the respective exercise prices therefor, the number and type of securities of the Company called for thereby in accordance with the terms thereof and such Representative's Warrants and Warrants are enforceable against the Company in accordance with their respective terms, except: (i) as such enforceability may be limited by applicable bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and similar laws relating to or affecting creditors' rights and remedies generally; (ii) as enforceability of any indemnification or contribution provision may be limited under foreign, federal and state securities laws; and (iii) that the remedy of specific performance and injunctive and other forms of equitable relief may be subject to the equitable defenses and to the discretion of the court before which any proceeding therefor may be brought.

(m) The Securities have been duly authorized for issuance and sale to the Underwriters or their nominees pursuant to this Agreement, and when the Securities have been issued and delivered by the Company pursuant to this Agreement against payment of the consideration set forth herein, such securities will be validly issued and fully paid and non-assessable; and the issuance of the Securities is not subject to the preemptive or other similar rights of any securityholder of the Company. The Securities conform in all material respects to all statements relating thereto contained in the Registration Statement, the General Disclosure Package and the Prospectus and such description conforms in all material respects to the rights set forth in the instruments defining the same; and no holder of the Common Stock will be subject to personal liability by reason of being such a holder. The certificates, if any, to be used to evidence the securities comprising Securities will, at the Closing Date, be in due and proper form and will comply in all material respects with all applicable legal requirements, the requirements of the charter and by-laws of the Company and the requirements of the NASDAQ Capital Market.

(n) The shares of Common Stock underlying the Warrants and the shares of Common Stock underlying the Representative's Warrants have been duly authorized for issuance, conform to the description thereof in the Registration Statement, the General Disclosure Package and in the Prospectus and have been validly reserved for future issuance and will, upon exercise of the Warrants and/or the Representative's Warrants and payment of the exercise price thereof, be duly and validly issued, fully paid and non-assessable and will not be subject to the preemptive or other similar rights of any securityholder of the Company. No holder of the Common Stock received upon exercise of the Warrants or the Representative's Warrants will be subject to personal liability by reason of being such a holder. The certificates, if any, to be used to evidence the Warrants and the Common Stock underlying the Warrants and Representative's Warrant, at the Closing Date, be in due and proper form and will comply in all material respects with all applicable legal requirements, the requirements of the charter and by-laws of the Company and the requirements of the NASDAQ Capital Market.

(o) The Company and each of its subsidiaries, if any, has all requisite corporate power and authority, and all necessary authorizations, approvals, consents, orders, licenses, certificates and permits of and from all governmental or regulatory bodies or any other person or entity (collectively, the "Permits"), to own, lease and license its assets and properties and conduct its business as presently conducted, all of which are valid and in full force and effect, except where the lack of such Permits, individually or in the aggregate, would not have a Material Adverse Effect. The Company and each of its subsidiaries, if any, have fulfilled and performed in all material respects all of their respective obligations with respect to such Permits and no event has occurred that allows, or after notice or lapse of time would allow, revocation or termination thereof or results in any other material impairment of the rights of such entity thereunder. Except as may be required under the Securities Act, state and foreign Blue Sky laws and the rules of the Financial Industry Regulatory Authority ("FINRA") and the NASDAQ Capital Market, no other Permits are required to enter into, deliver and perform the obligations of the Company under this Agreement, the Warrants or the Representative's Warrant and for the Company to issue and sell the Securities.

(p) The Company and each of its subsidiaries owns or possesses legally enforceable rights to use all patents, patent rights, inventions, trademarks, trademark applications, trade names, service marks, copyrights, copyright applications, licenses, know-how and other similar rights and proprietary knowledge (collectively, "Intangibles") necessary for the conduct of its business. Neither the Company nor any of its subsidiaries has received any notice of, or is not aware of, any infringement of or conflict with asserted rights of others with respect to any Intangibles.

(q) Subsequent to the respective dates as of which information is given in the Registration Statement, the General Disclosure Package and the Prospectus: (i) there has not been any event which would reasonably be expected to result in a Material Adverse Effect; (ii) neither the Company nor any of its subsidiaries has sustained any loss or interference with its assets, businesses or properties (whether owned or leased) from fire, explosion, earthquake, flood or other calamity, whether or not covered by insurance, or from any labor dispute or any court or legislative or other governmental action, order or decree which would reasonably be expected to materially affect the financial results or financial condition of the Company or any of its subsidiaries. Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, since the date of the latest balance sheet included in the Registration Statement, the General Disclosure Package and the Prospectus, neither the Company nor any of its subsidiaries has (A) issued any securities or incurred any liability or obligation, direct or contingent, for borrowed money, except such liabilities or obligations incurred in the ordinary course of business, (B) entered into any transaction not in the ordinary course of business or (C) declared or paid any dividend or made any distribution on any shares of its stock or redeemed, purchased or otherwise acquired or agreed to redeem, purchase or otherwise acquire any shares of its capital stock.

(r) There is no document, contract or other agreement required to be described in the Registration Statement, the General Disclosure Package or the Prospectus or to be filed as an exhibit to the Registration Statement which is not described or filed as required by the Securities Act or Rules. Each description of a contract, document or other agreement in the Registration Statement, the General Disclosure Package or the Prospectus accurately reflects in all material respects the terms of the underlying contract, document or other agreement. Each contract, document or other agreement described in the Registration Statement, the General Disclosure Package or the Prospectus or filed as exhibits to the Registration Statement is, or upon consummation of the Offering will be, in full force and effect and is valid and enforceable in all material respects by and against the Company or any of its subsidiaries, as the case may be, in accordance with its terms, except (i) such contracts or other agreements that have terminated or expired in accordance with their terms as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, and (ii) as enforceability may be limited by applicable bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and similar laws relating to or affecting creditors' rights and remedies generally, and subject, as to enforceability, to general principles of equity and, with respect to equitable relief, the discretion of the court before which any proceeding therefor may be brought (regardless of whether enforcement is sought in a proceeding at law or in equity), and with respect to indemnification thereunder, except as rights may be limited by applicable law or policies underlying such law. To the knowledge of the Company, neither the Company nor any of its subsidiaries is in default in the observance or performance of any term or obligation to be performed by it under any such agreement, and no event has occurred which with notice or lapse of time or both would constitute such a default. No default exists, and no event has occurred which with notice or lapse of time or both would constitute a default, in the due performance and observance of any term, covenant or condition, by the Company or any of its subsidiaries, if a subsidiary is a party thereto, of any other agreement or instrument to which it is a party or by which it or its properties or business may be bound or affected which default or event, individually or in the aggregate, would reasonably be expected to have a Material Adverse Effect.

(s) The statistical and market related data included in the Registration Statement, the General Disclosure Package or the Prospectus are based on or derived from sources that the Company believes to be reliable and accurate. The Company had a reasonable basis for, and made in good faith, each "forward-looking statement" (within the meaning of Section 27A of the Act or Section 21E of the Exchange Act) contained or incorporated by reference in the Registration Statement, the General Disclosure Package, the Prospectus or the Marketing Materials.

(t) Neither the Company nor any of its subsidiaries (i) is in violation of its certificate or articles of incorporation, by-laws, certificate of limited partnership, agreement of limited partnership, certificate of formation, operating agreement or other organizational documents, (ii) is in default under, and no event has occurred which, with notice or lapse of time, or both, would constitute a default under, or result in the creation or imposition of any lien, charge, mortgage, pledge, security interest, claim, limitation on voting rights, equity, trust or other encumbrance, preferential arrangement, defect or restriction of any kind whatsoever, upon, any property or assets of the Company or any of its subsidiaries pursuant to, any bond, debenture, note, indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which it is a party or by which it is bound or to which any of its properties or assets is subject or (iii) is in violation of any statute, law, rule, regulation, ordinance, directive, judgment, decree or order of any judicial, regulatory or other legal or governmental agency or body, foreign or domestic, except (in the case of clauses (ii) and (iii) above) for violations or defaults that could not (individually or in the aggregate) reasonably be expected to have a Material Adverse Effect.

(u) Neither the execution, delivery and performance of this Agreement, the Warrants, the Representative's Warrant by the Company nor the consummation of any of the transactions contemplated hereby (including, without limitation, the issuance and sale by the Company of the Securities) will give rise to a right to terminate or accelerate the due date of any payment due under, or conflict with or result in the breach of any term or provision of, or constitute a default (or an event which with notice or lapse of time or both would constitute a default) under, or require any consent or waiver under, or result in the execution or imposition of any lien, charge or encumbrance upon any properties or assets of the Company or any of its subsidiaries pursuant to the terms of: (i) any indenture, mortgage, deed of trust or other agreement or instrument to which either of the Company or any of its subsidiaries is a party or by which the Company or any of its subsidiaries or any of their properties or businesses is bound, or any franchise, license, permit, judgment, decree, order, statute, rule or regulation applicable to either of the Company or any of its subsidiaries, or (ii) violate any provision of certificate or articles of incorporation, by-laws, certificate of limited partnership, agreement of limited partnership, certificate of formation, operating agreement or other organizational documents of either of the Company or any of its subsidiaries, except (A) in the case of clause (i) above, for violations or defaults that would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, and (B) for such consents or waivers which have already been obtained and are in full force and effect.

(v) Except as otherwise set forth in the Registration Statement, the General Disclosure Package and the Prospectus, no holder of any security of the Company has any right, which has not been waived or satisfied prior to the date hereof, to have any security owned by such holder included in the Registration Statement or to demand registration of any security owned by such holder. Each director and executive officer of the Company and each stockholder of the Company listed on **Schedule III** hereto has delivered to the Representative his, her or its enforceable written lock-up agreement in the form attached to this Agreement as **Exhibit A** hereto ("**Lock-Up Agreement**").

(w) Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, there are no legal or governmental proceedings pending to which either of the Company or any of its subsidiaries is a party or of which any property of the Company or any of its subsidiaries is the subject; and, to the knowledge of the Company, no such proceedings are threatened or contemplated by governmental authorities or threatened by others.

(x) Neither the Company nor any of its subsidiaries is involved in any labor dispute or, to the knowledge of the Company, is any such dispute threatened, which dispute would reasonably be expected to result in a Material Adverse Effect. The Company is not aware of any existing or imminent labor disturbance by the employees of any of its or its subsidiaries, principal suppliers or contractors which would reasonably be expected to result in a Material Adverse Effect. The Company is not aware of any threatened or pending litigation between either of the Company or any of its subsidiaries and any of its executive officers and has no reason to believe that such officers will not remain in the employment of the Company or its subsidiaries, as the case may be.

(y) No transaction has occurred between or among either of the Company, its subsidiaries and any of their officers or directors, or five percent stockholders or any affiliate or affiliates of any such officer or director or five percent stockholders that is required to be described in and is not described in the Registration Statement, the General Disclosure Package and the Prospectus.

(z) Neither the Company nor any of its subsidiaries has taken, nor will it take, directly or indirectly, any action designed to or which might reasonably be expected to cause or result in, or which has constituted or which might reasonably be expected to constitute, the stabilization or manipulation of the price of the Common Stock or any other security of the Company to facilitate the sale or resale of any of Securities.

(aa) The Company and its subsidiaries have filed all federal, state, local and foreign tax returns which are required to be filed through the date hereof, which returns are true and correct in all material respects or has received timely extensions thereof, and has paid all taxes shown on such returns and all assessments received by it to the extent that the same are material and have become due. There are no material tax audits or investigations pending; nor are there any material proposed additional tax assessments against either the Company or its subsidiaries.

(bb) The Common Stock and the Warrants have been duly authorized for listing on the NASDAQ Capital Market. The Company has filed with the Commission on Forms 8-A (File Number 001-36745) to register under Section 12(b) of the Exchange Act Common Stock and the Warrants. The registration of the Common Stock and Warrants under the Exchange Act has each been declared effective by the Commission on the date hereof. The Common Stock and Warrants have each been registered as a class of securities pursuant to Section 12(b) of the Exchange Act.

(cc) The Company has not taken any action designed to, or likely to have the effect of, terminating the registration of the Common Stock and Warrants under the Exchange Act or the listing of the Common Stock or Warrants on the NASDAQ Capital Market, nor has the Company received any notification that the Commission or the NASDAQ Capital Market is contemplating terminating such registration or listing.

(dd) The books, records and accounts of the Company and its subsidiaries accurately and fairly reflect, in all material respects, the transactions in, and dispositions of, the assets of, and the results of operations of, the Company and its subsidiaries. Except as disclosed in the Registration Statement, General Disclosure Package and Prospectus, the Company and its subsidiaries maintain a system of internal accounting controls sufficient to provide reasonable assurances that (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles and to maintain asset accountability, (iii) access to assets is permitted only in accordance with management's general or specific authorization and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences.



(ee) The Company is not aware of (i) any material weakness or significant deficiency in the design or operation of internal controls which could adversely affect the Company's ability to record, process, summarize and report financial data or any material weaknesses in internal controls, except as disclosed in the Registration Statement, General Disclosure Package and Prospectus; or (ii) any fraud, whether or not material, that involves management or other employees who have a role in the Company's internal controls.

(ff) Except as described in the General Disclosure Package and the Prospectus and as preapproved in accordance with the requirements set forth in Section 10A of the Exchange Act, the Auditor has not been engaged by the Company to perform any "prohibited activities" (as defined in Section 10A of the Exchange Act).

(gg) Except as described in the General Disclosure Package and the Prospectus, there are no material off-balance sheet arrangements (as defined in Item 303 of Regulation S-K) that have or are reasonably likely to have a material current or future effect on the Company's financial condition, revenues or expenses, changes in financial condition, results of operations, liquidity, capital expenditures or capital resources.

(hh) The Company's Board of Directors has validly established an audit committee whose composition satisfies, and upon completion of the Offering will satisfy, the requirements of Rule 5605 of the NASDAQ Stock Market Listing Rules and the Board of Directors and/or the audit committee of the Board of Directors has adopted a charter that satisfies the requirements of Rule 5605 of the NASDAQ Stock Market Listing Rules.

(ii) The Company's Board of Directors has validly established a compensation committee whose composition satisfies, and upon completion of the Offering will satisfy, the requirements of Rule 5605 of the NASDAQ Stock Market Listing Rules and the Board of Directors and/or the compensation committee of the Board of Directors has adopted a charter that satisfies the requirements of Rule 5605 of the NASDAQ Stock Market Listing Rules.

(jj) The Company has taken all necessary actions to ensure that, at the time of effectiveness of the Registration Statement, it will be in compliance in all material respects with all provisions of the Sarbanes-Oxley Act of 2002 and all rules and regulations promulgated thereunder or implementing the provisions thereof (the "**Sarbanes-Oxley Act**") that are then in effect and with which the Company is required to comply as of the effectiveness of the Registration Statement. The Company has not, directly or indirectly, including through any subsidiary, extended credit, arranged to extend credit, or renewed any extension of credit, in the form of a personal loan, to or for any executive officer of the Company or any of its subsidiaries, or to or for any family member or affiliate of any director or executive officer of the Company or any of its subsidiaries.

(kk) The Company and its subsidiaries carry or are entitled to the benefits of insurance, with financially sound and reputable insurers, in such amounts and covering such risks as is generally maintained by companies of established repute engaged in the same or similar business, and all such insurance is in full force and effect. The Company does not have any reason to believe that it or any of its subsidiaries will not be able (A) to renew, if desired, its existing insurance coverage as and when such policies expire or (B) to obtain comparable coverage from similar institutions as may be necessary or appropriate to conduct its business as now conducted and not at a cost that is materially more significant. Neither the Company nor any of its subsidiaries has been denied any insurance coverage that it has sought or for which it has applied.

(ll) There are no claims, payments, issuances, arrangements or understandings for services in the nature of a finder's, consulting or origination fee with respect to the introduction of the Company to the Underwriters or the sale of Securities hereunder or any other arrangements, agreements, understandings, payments or issuances with respect to the Company that may affect the Underwriters' compensation, as determined by the FINRA.

(mm) Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, the Company has not made any direct or indirect payments (in cash, securities or otherwise) to: (i) any person, as a finder's fee, investing fee or otherwise, in consideration of such person raising capital for the Company or introducing to the Company persons who provided capital to the Company, (ii) any FINRA member, or (iii) any person or entity that, to the Company's knowledge, has any direct or indirect affiliation or association with any FINRA member within the 12-month period prior to the date on which the Registration Statement was filed with the Commission ("**Filing Date**") or thereafter.

(nn) None of the net proceeds of the Offering will be paid by the Company to any participating FINRA member or any affiliate or associate of any participating FINRA member, except as specifically authorized herein.

(oo) To the knowledge of the Company, no: (i) officer or director of the Company or its subsidiaries, (ii) owner of 5% or more of the Company's unregistered securities or (iii) owner of any amount of the Company's unregistered securities acquired within the 180-day period prior to the Filing Date, has any direct or indirect affiliation or association with any FINRA member. The Company will advise the Underwriters and their counsel if it becomes aware that any officer, director or stockholder of the Company or its subsidiaries is or becomes an affiliate or associated person of a FINRA member participating in the Offering.

(pp) Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus: (i) the Company and each of its subsidiaries is in compliance in all material respects with all rules, laws and regulation relating to the use, treatment, storage and disposal of toxic substances and protection of health or the environment ("**Environmental Law**") which are applicable to its business; (ii) neither the Company nor any of its subsidiaries has received any notice from any governmental authority or third party of an asserted claim under Environmental Laws; (iii) the Company and each of its subsidiaries has received all permits, licenses or other approvals required of it under applicable Environmental Laws to conduct its business and is in compliance in all material respects with all terms and conditions of any such permit, license or approval; (iv) to the knowledge of the Company, no facts currently exist that will require either Company or its subsidiaries to make future material capital expenditures to comply with Environmental Laws; and (v) no property which is or has been owned, leased or occupied by either of the Company or its subsidiaries has been designated as a "Superfund site" pursuant to the Comprehensive Environmental Response, Compensation of Liability Act of 1980, as amended (42 U.S.C. Section 9601, et. seq.) ("**CERCLA**"), or otherwise designated as a contaminated site under applicable state or local law. Neither the Company nor its subsidiaries has been named as a "potentially responsible party" under CERCLA.

(qq) The Company is not and, after giving effect to the Offering, the sale of Securities and the application of proceeds thereof as described in the General Disclosure Package and the Prospectus, will not be an "investment company" within the meaning of the Investment Company Act of 1940, as amended.

(rr) Neither the Company nor any other person associated with it or acting on its behalf including, without limitation, any director, officer, agent or employee of the Company or its subsidiaries, has, directly or indirectly, while acting on behalf of the Company or its subsidiaries: (i) used any corporate funds for unlawful contributions, gifts, entertainment or other unlawful expenses relating to political activity; (ii) made any unlawful payment to foreign or domestic government officials or employees or to foreign or domestic political parties or campaigns from corporate funds; (iii) violated any provision of the Foreign Corrupt Practices Act of 1977, as amended; or (iv) made any other unlawful payment.

(ss) No payment has been made by the Company or its subsidiaries, or by any person authorized to act on their behalf, to any person in connection with any contracts with any governmental entity or regulatory agency ("**Government Contracts**"), in violation of applicable procurement laws or regulations. The Company's and its subsidiaries' cost accounting and procurement systems with respect to Government Contracts are in compliance in all material respects with all applicable governmental regulations and requirements. With respect to each Government Contract: (i) the Company and each subsidiary have complied with all material terms and conditions of such Government Contract, including all clauses, provisions and requirements incorporated expressly, by reference or by operation of law therein; (ii) the Company and each such subsidiary have complied with all material requirements of applicable laws pertaining to such Government Contract; (iii) all representations and certifications executed, acknowledged or set forth in or pertaining to such Government Contract were complete and correct in all material respects as of their effective date, and the Company and each subsidiary have complied in all material respects with all such representations and certifications; (iv) neither the United States government nor any prime contractor, subcontractor or other person has notified the Company or any subsidiary, either orally or in writing, that the Company or such subsidiary has breached or violated any applicable law, or any material certification, representation, clause, provision or requirement pertaining to such Government Contract; and (v) no termination for convenience, termination for default, cure notice or show cause notice is in effect as of the date hereof pertaining to any Government Contract. Neither the Company nor any of its subsidiaries nor any of their respective directors, officers or employees is (or during the last three (3) years has been) under administrative, civil or criminal investigation, or indictment or audit by any governmental authority with respect to any alleged irregularity, misstatement or omission arising under or relating to any Government Contract (other than routine Defense Contract Audit Agency audits, in which no such irregularities, misstatements or omissions were identified). During the last three (3) years, neither the Company nor any of its subsidiaries has conducted or initiated any internal investigation or made a voluntary disclosure to the United States government, with respect to any alleged irregularity, misstatement or omission arising under or relating to any Government Contract. There are no outstanding claims against the Company or any subsidiary, either by the United States government or by any prime contractor, subcontractor, vendor or other third party, arising under or relating to any Government Contract. There are no disputes between the Company or any subsidiary and the United States government under the Contract Disputes Act or any other statute or between the Company or any subsidiary and any prime contractor, subcontractor or vendor arising under or relating to any Government Contract. Neither the Company nor any subsidiary nor, to the Company's knowledge, any of its or the subsidiary's directors, officers or employees is (or during the last three (3) years has been) suspended or debarred from doing business with the United States government or is (or during such period was) the subject of a finding of non-responsibility or ineligibility for United States government contracting. There is no suit or investigation pending and, to the Company's knowledge, no suit or investigation threatened against the Company or any subsidiary with respect to any Government Contract.

(tt) The operations of the Company and its subsidiaries are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering statutes of all jurisdictions, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the "**Money Laundering Laws**") and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company and its subsidiaries with respect to the Money Laundering Laws is pending, or to the knowledge of the Company, threatened.

(uu) Neither the Company nor any of its subsidiaries, nor, to the knowledge of the Company, any director, officer, agent, employee or affiliate of the Company or its subsidiaries is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department ("**OFAC**"); and the Company will not directly or indirectly use the proceeds of the Offering, or lend, contribute or otherwise make available such proceeds to its subsidiaries or any joint venture partner or other person or entity, for the purpose of financing the activities of any person currently subject to any U.S. sanctions administered by OFAC.

(vv) Neither the Company nor any of its directors or officers or, to the best knowledge of the Company, any agent, employee, affiliate or other person acting on behalf of the Company has engaged in any activities sanctionable under the Comprehensive Iran Sanctions, Accountability, and Divestment Act of 2010, the Iran Sanctions Act of 1996, the National Defense Authorization Act for Fiscal Year 2012, the Iran Threat Reduction and Syria Human Rights Act of 2012 or any Executive Order relating to any of the foregoing (collectively, and as each may be amended from time to time, the "**Iran Sanctions**"); and the Company will not directly or indirectly use the proceeds of the Offering, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity, for the purpose of engaging in any activities sanctionable under the Iran Sanctions.

(ww) Except as described in the Registration Statement, the General Disclosure Package and the Prospectus, the Company has not sold or issued any shares of Common Stock during the six-month period preceding the date of the Prospectus, including any sales pursuant to Rule 144A under, or Regulations D or S of, the Securities Act, other than shares issued pursuant to employee benefit plans, qualified stock options plans or other employee compensation plans or pursuant to outstanding options, rights or warrants. Neither the Company nor any of its affiliates (as such term is defined under Rule 144 of the Securities Act) has, prior to the date hereof, made any offer or sales of any securities which are required to be "integrated" pursuant to the Securities Act or the Rules with the offer and sale of the Securities pursuant to the Registration Statement.

(xx) The Company fulfilled its obligations, if any, under the minimum funding standards of Section 302 of the U.S. Employee Retirement Income Security Act of 1974 ("**ERISA**") and the regulations and published interpretations thereunder with respect to each "plan" as defined in Section 3(3) of ERISA and such regulations and published interpretations in which its employees are eligible to participate and each such plan is in compliance in all material respects with the presently applicable provisions of ERISA and such regulations and published interpretations. No "Reportable Event" (as defined in 12 ERISA) has occurred with respect to any "Pension Plan" (as defined in ERISA) for which the Company could have any liability. The execution of this Agreement, the Warrants, the Representative's Warrants or consummation of the Offering does not constitute a triggering event under any plan or any other employment contract, whether or not legally enforceable, which (either alone or upon the occurrence of any additional or subsequent event) will or may result in any payment (of severance pay or otherwise), acceleration, increase in vesting, or increase in benefits to any current or former participant, employee or director of the Company or any of its subsidiaries.

(yy) The statements in (i) the Registration Statement, the General Disclosure Package and the Prospectus under the headings "Description of Securities," "Underwriting" (other than the Underwriter Information), "Executive Compensation" and "Certain Relationships and Related Transactions, and Director Independence" insofar as such statements summarize legal matters, agreements, documents or proceedings discussed therein, are accurate and fair summaries of such legal matters, agreements, documents or proceedings in all material respects.

(zz) All information contained in the questionnaires completed by each of the Company's officers and directors and provided to the Representative as well as the biographies of such individuals in the Registration Statement is true and correct in all material respects and the Company has not become aware of any information that would cause the information disclosed in the questionnaires completed by the directors and officers to become inaccurate and incorrect.

(aaa) The Company and its subsidiaries own or lease all such properties as are necessary to the conduct of its business as presently operated and as proposed to be operated as described in the Registration Statement, the General Disclosure Package and the Prospectus. The Company and its subsidiaries have good and marketable title to all personal property owned by them, free and clear of all liens except such as are described in the Registration Statement, the General Disclosure Package and the Prospectus or such as do not (individually or in the aggregate) materially affect the business or prospects of the Company or its subsidiaries. Any real property and buildings held under lease or sublease by the Company and its subsidiaries are held by them under valid, subsisting and enforceable leases with such exceptions as are not material to, and do not interfere with, the use made and proposed to be made of such property and buildings by the Company and its subsidiaries. Neither the Company nor any of its subsidiaries has received any notice of any claim adverse to its ownership of any real or personal property or of any claim against the continued possession of any real property, whether owned or held under lease or sublease by the Company or its subsidiaries.

(bbb) Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, there is no judicial, regulatory, arbitral or other legal or governmental proceeding or other litigation or arbitration, domestic or foreign, pending to which the Company or any of its subsidiaries is a party or of which any property, operations or assets of the Company or any of its subsidiaries is the subject. To the Company's knowledge, no such proceeding, litigation or arbitration is threatened or contemplated.

3. **Conditions of the Underwriters' Obligations.** The obligations of the Underwriters under this Agreement are several and not joint. The respective obligations of the Underwriters to purchase the Securities are subject to each of the following terms and conditions:

(a) The Registration Statement has become effective and the Prospectus shall have been timely filed with the Commission in accordance with Section 4(a) of this Agreement and any material required to be filed by the Company pursuant to Rule 433(d) of the Rules shall have been timely filed with the Commission in accordance with such rule.

(b) No order preventing or suspending the use of any Preliminary Prospectus, the Prospectus or any Issuer Free Writing Prospectus shall have been or shall be in effect and no order suspending the effectiveness of the Registration Statement shall be in effect and no proceedings for such purpose shall be pending before or threatened by the Commission, and any requests for additional information on the part of the Commission (to be included in the Registration Statement or the Prospectus or otherwise) shall have been complied with to the satisfaction of the Commission and the Representative. If the Company has elected to rely upon Rule 430A, Rule 430A information previously omitted from the effective Registration Statement pursuant to Rule 430A shall have been transmitted to the Commission for filing pursuant to Rule 424(b) within the prescribed time period and the Company shall have provided evidence satisfactory to the Underwriters of such timely filing, or a post-effective amendment providing such information shall have been promptly filed and declared effective in accordance with the requirements of Rule 430A.

(c) The representations and warranties of the Company contained in this Agreement and in the certificates delivered pursuant to Section 3(e) shall be true and correct when made and on and as of each Closing Date as if made on such date. The Company shall have performed in all material respects all covenants and agreements and satisfied all the conditions contained in this Agreement required to be performed or satisfied by it at or before such Closing Date.

(d) The Representative shall have reasonably determined, and advised the Company, that the Registration Statement or the Prospectus, or any amendment thereof or supplement thereto contains an untrue statement of fact which, in the Representative's reasonable opinion, is material, or omits to state a fact which, in the Representative's reasonable opinion, is material and is required to be stated therein or necessary to make the statements therein not misleading.

(e) The Representative shall have received on each Closing Date a certificate, addressed to the Representative and dated such Closing Date, of chief executive officer and chief financial officer of the Company to the effect that: (i) the representations, warranties and agreements of the Company in this Agreement were true and correct when made and are true and correct as of such Closing Date; (ii) the Company has performed in all material respects all covenants and agreements and satisfied all conditions contained herein; (iii) they have carefully examined the Registration Statement, the Prospectus, the General Disclosure Package, and any individual Issuer Free Writing Prospectus and, in their opinion (A) as of the Effective Date the Registration Statement and Prospectus did not include, and as of the Applicable Time, neither (i) the General Disclosure Package, nor (ii) any individual Issuer Free Writing Prospectus, when considered together with the General Disclosure Package, included, any untrue statement of a material fact and did not omit to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, and (B) since the Effective Date no event has occurred which should have been set forth in a supplement or otherwise required an amendment to the Registration Statement, the General Disclosure Package or the Prospectus; (iv) no stop order suspending the effectiveness of the Registration Statement has been issued and, to their knowledge, no proceedings for that purpose have been instituted or are pending under the Securities Act; and (v) subsequent to the respective dates as of which information is given in the Registration Statement and the Prospectus there has not been any Material Adverse Effect or any event that is likely to result in a Material Adverse Effect, whether or not arising from transactions in the ordinary course of business.

(f) The Representative shall have received: (i) simultaneously with the execution of this Agreement a signed letter from the Auditor and Marcum LLP addressed to the Representative and dated the date of this Agreement, in form and substance reasonably satisfactory to the Representative, containing statements and information of the type ordinarily included in accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial information contained in the Registration Statement and the Disclosure Package, and (ii) on each Closing Date, a signed letter from the Auditor and Marcum LLP addressed to the Representative and dated the date of such Closing Date(s), in form and substance reasonably satisfactory to the Representative containing statements and information of the type ordinarily included in accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial information contained in the Registration Statement and the Prospectus.

(g) On each Closing Date, the Representative shall have received the favorable opinion, dated as of such Closing Date, of Fulbright & Jaworski LLP, as counsel to the Company, in form and substance reasonably satisfactory to counsel for the Underwriters.

(h) On each Closing Date, the Representative shall have received the favorable intellectual property legal opinion, dated as of such Closing Date, from intellectual property legal counsel to the Company, in form and substance reasonably satisfactory to counsel for the Underwriters.

(i) On each Closing Date, there shall have been furnished to the Underwriters the negative assurance letter of Harter Secrest & Emery LLP, counsel to the Underwriters, dated such Closing Date, as applicable, and addressed to the Underwriters, in form and substance reasonably satisfactory to the Underwriters.

(j) All proceedings taken in connection with the sale of Securities and the Option Securities as herein contemplated shall be reasonably satisfactory in form and substance to the Representative and their counsel.

(k) The Representative shall have received copies of the Lock-up Agreements in form and substance reasonably satisfactory to counsel for the Underwriters executed by each entity or person listed on **Schedule III** hereto.

(l) The Securities shall have been approved for listing on the NASDAQ Capital Market and satisfactory evidence of such action shall have been provided to the Representative. The Company shall have taken no action designed to, or likely to have the effect of terminating the registration of the Common Stock and Warrants under the Exchange Act or delisting or suspending from trading the Common Stock and Warrants from the NASDAQ Capital Market, nor has the Company received any information suggesting that the Commission or NASDAQ Capital Market is contemplating terminating such registration or listing. The Shares, the Warrants and shares of Common Stock underlying the Warrants and Representative's Warrants shall be DTC eligible.

(m) Subsequent to the execution and delivery of this Agreement or, if earlier, the dates as of which information is given in the Registration Statement, the General Disclosure Package or the Prospectus: (i) there shall not have been any material change in the capital stock of the Company or any material change in the indebtedness (other than in the ordinary course of business) of the Company or its subsidiaries, (ii) except as set forth or contemplated by the Registration Statement, the General Disclosure Package or the Prospectus, no material oral or written agreement or other transaction shall have been entered into by the Company that is not in the ordinary course of business or that could reasonably be expected to result in a material reduction in the future earnings of the Company, (iii) no loss or damage (whether or not insured) to the property of the Company shall have been sustained that had or could reasonably be expected to have a Material Adverse Effect, (iv) no legal or governmental action, suit or proceeding affecting the Company or any of its properties that is material to the Company or that affects or could reasonably be expected to affect the transactions contemplated by this Agreement shall have been instituted or threatened and (v) there shall not have been any material change in the assets, properties, condition (financial or otherwise), or in the results of operations, business affairs or business prospects of the Company or its subsidiaries considered as a whole that makes it impractical or inadvisable in the Representative's judgment to proceed with the purchase or offering of Securities as contemplated hereby.

(n) On Securities Closing Date, FINRA shall have confirmed that it has not raised any objection with respect to the fairness and reasonableness of the underwriting terms and agreements in connection with the Offering.

(o) The Company shall have furnished or caused to be furnished to the Representative such further customary certificates or documents as the Representative shall have reasonably requested.

If any of the conditions specified in this Section 3 shall not have been fulfilled when and as required by this Agreement, the obligations of the Underwriters to consummate the Closing hereunder may be cancelled by the Representative after notice of such cancellation shall have been given to the Company in writing and the Company shall have been given a reasonable period of time to satisfy such condition (if such condition is capable of being satisfied).

#### **4. Covenants and Other Agreements of the Company.**

(a) The Company covenants and agrees as follows:

(i) The Registration Statement and any amendments thereto have been declared effective. The Company shall prepare the Prospectus in a form approved by the Representative and file such Prospectus pursuant to Rule 424(b) under the Securities Act not later than the Commission's close of business on the second business day following the execution and delivery of this Agreement, or, if applicable, such earlier time as may be required by the Rules. The Company will file with the Commission all Issuer Free Writing Prospectuses in the time and manner required under Rules 433(d) or 163(b)(2), as the case may be.

(ii) If the Company elects to rely on Rule 462(b) under the Securities Act, the Company will both file a Rule 462(b) Registration Statement with the Commission in compliance with Rule 462(b) and pay the applicable fees in accordance with Rule 111 of the Securities Act.

(iii) The Company shall promptly advise the Representative in writing (A) when any post-effective amendment to the Registration Statement shall have become effective or any supplement to the Prospectus shall have been filed, (B) of any request by the Commission for any amendment of the Registration Statement or the Prospectus or for any additional information, (C) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or of any order preventing or suspending the use of any preliminary prospectus or any "free writing prospectus", as defined in Rule 405 of the Rules, or the institution or threatening of any proceeding for that purpose and (D) of the receipt by the Company of any notification with respect to the suspension of the qualification of the Securities for sale in any jurisdiction or the initiation or threatening of any proceeding for such purpose. The Company shall not file any amendment of the Registration Statement or supplement to the Prospectus or any Issuer Free Writing Prospectus unless the Company has furnished the Representative a copy for its review prior to filing and shall not file any such proposed amendment or supplement to which the Representative reasonably objects. The Company shall use its best efforts to prevent the issuance of any such stop order and, if issued, to obtain as soon as possible the withdrawal thereof.

(iv) If, at any time when a Prospectus relating to Securities (or, in lieu thereof, the notice referred to in Rule 173(a) of the Rules) is required to be delivered under the Securities Act, any event occurs as a result of which the Prospectus as then amended or supplemented would include any untrue statement of a material fact or omit to state any material fact necessary to make the statements therein in the light of the circumstances under which they were made not misleading, or if it shall be necessary to amend or supplement the Prospectus to comply with the Securities Act or the Rules, the Company promptly shall prepare and file with the Commission, subject to the second sentence of Paragraph (ii) of this Section 4(a), an amendment or supplement which shall correct such statement or omission or an amendment which shall effect such compliance.

(v) If at any time following issuance of an Issuer Free Writing Prospectus there occurs an event or development as a result of which such Issuer Free Writing Prospectus would conflict with the information contained in the Registration Statement or would include an untrue statement of a material fact or would omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances prevailing at the subsequent time, not misleading, the Company will promptly notify the Representative and will promptly amend or supplement, at its own expense, such Issuer Free Writing Prospectus to eliminate or correct such conflict, untrue statement or omission.

(vi) The Company will timely file such reports pursuant to the Exchange Act as are necessary in order to make generally available to securityholders as soon as practicable an earnings statement for the purposes of, and to provide the benefits contemplated by, the last paragraph of Section 11(a) of the Securities Act.

(vii) The Company shall furnish to the Representative and counsel for the Underwriters, without charge, signed copies of the Registration Statement (including all exhibits thereto and amendments thereof) and to each other Underwriter a copy of the Registration Statement (without exhibits thereto) and all amendments thereof and, so long as delivery of a prospectus by an Underwriter or dealer may be required by the Securities Act or the Rules, as many copies of any Preliminary Prospectus, any Issuer Free Writing Prospectus and the Prospectus and any amendments thereof and supplements thereto as the Representative may reasonably request. If applicable, the copies of the Registration Statement, preliminary prospectus, any Issuer Free Writing Prospectus and Prospectus and each amendment and supplement thereto furnished to the Underwriters will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.



(viii) The Company shall cooperate with the Representative and its counsel in endeavoring to qualify Securities for offer and sale in connection with the Offering under the laws of such jurisdictions as the Representative may designate and shall maintain such qualifications in effect so long as required for the distribution of the Securities; provided, however, that the Company shall not be required in connection therewith, as a condition thereof, to qualify as a foreign corporation or to execute a general consent to service of process in any jurisdiction or subject itself to taxation as doing business in any jurisdiction.

(ix) The Company, during the period when the Prospectus (or in lieu thereof, the notice referred to in Rule 173(a) of the Rules) is required to be delivered under the Securities Act and the Rules or the Exchange Act, will file all reports and other documents required to be filed with the Commission pursuant to Section 13, 14 or 15 of the Exchange Act within the time periods required by the Exchange Act and the regulations promulgated thereunder.

(x) The Company shall, during the term of the Lock-Up Agreements, enforce the terms thereof and impose stop-transfer restrictions on any sale or other transfer or disposition of Company securities until the end of the term of the Lock-Up Agreements.

(xi) On or before completion of this Offering, the Company shall make all filings required under applicable securities laws and by the NASDAQ Capital Market (including any required registration under the Exchange Act).

(xii) The Company will issue no press release or other communications directly or indirectly and hold no press conference with respect to the Company, its condition, financial or otherwise, or its earnings, business affairs or business prospects, or the Offering for a period of time ending on the first business day following the forty-fifth (45) day following the Closing Date, without the prior written consent of the Representative other than normal and customary releases issued in the ordinary course of the Company's business or as required by law.

(xiii) The Company will apply the net proceeds from the Offering in the manner set forth under "Use of Proceeds" in the Prospectus.

(xiv) The Company will use its best efforts to effect and maintain the listing of the Securities (including the Common Stock into which the Warrant and the Representative's Warrant may be converted) on the NASDAQ Capital Market for at least three years after the Closing Date.

(xv) Except with respect to (x) the issuance of securities pursuant to the exercise or conversion of outstanding options or warrants or other rights to receive securities of the Company that exist as of the Closing Date; or (y) the issuance of securities pursuant to an equity incentive plan, during the ninety (90) days following the Closing Date, the Company will not undertake any public or private offerings of any equity securities of the Company without the prior written consent of the Representative, which consent will not be unreasonably withheld.

(xvi) The Company will not take, and will cause its affiliates (as such term is defined by Rule 144 of the Act) not to take, directly or indirectly, any action which constitutes or is designed to cause or result in, or which could reasonably be expected to constitute, cause or result in, the stabilization or manipulation of the prices of any security to facilitate the sale or resale of the Securities.

(xvii) For so long as they are legally required to do so, the Company will use its best efforts to comply in all material respects with all applicable provisions of the Sarbanes-Oxley Act that are in effect.

(b) The Company agrees to pay, or reimburse if paid by the Representative, whether or not the transactions contemplated hereby are consummated or this Agreement is terminated, all costs and expenses incident to the Offering up to a maximum of \$100,000 and the performance of the obligations of the Company under this Agreement including those relating to: (i) the preparation, printing, reproduction filing and distribution of the Registration Statement including all exhibits thereto, each Preliminary Prospectus, the Prospectus, any Issuer Free Writing Prospectus, all amendments and supplements thereto, and the printing, filing and distribution of this Agreement; (ii) the preparation and delivery of certificates for the Securities to the Underwriters, if any; (iii) the registration or qualification of Securities and/or the Common Stock underlying the Warrant and Representative's Warrant for offer and sale under the securities or Blue Sky laws of the various requisite jurisdictions, including the reasonable fees and disbursements of counsel for the Underwriters (not to exceed \$10,000) in connection with such registration and qualification and the preparation, printing, distribution and shipment of preliminary and supplementary Blue Sky memoranda; (iv) the furnishing (including costs of shipping and mailing) to the Representative and to the Underwriters of copies of each Preliminary Prospectus, the Prospectus and all amendments or supplements to the Prospectus, any Issuer Free Writing Prospectus, and of the several documents required by this Section to be so furnished, as may be reasonably requested for use by the Underwriters or by dealers to whom Securities may be sold in connection with the Offering; (v) the filing fees of FINRA in connection with its review of the terms of the Offering and reasonable fees and disbursements of counsel for the Underwriters in connection with such review; and (vi) inclusion of the Securities (and the Common Stock the Warrants and Representative's Warrant may be converted) for listing on the NASDAQ Capital Market. In addition to the foregoing and the fees in Section 1, the Company has provided the Representative (but no other Underwriter) an advance in the maximum amount of \$40,000 for its expenses (which amount shall be inclusive of the advances made to the Representative prior to the date hereof), including legal fees, background search firm fees, and road show expenses, incurred in connection with the Offering (collectively, the "Advance"), provided that any funds provided under the Advance shall be applied solely towards the Representative's accountable out-of-pocket expenses actually anticipated to be incurred by the Representative and its agents. Any unused portion of the Advance shall be returned to the Company upon the termination of the "Engagement Period" (as defined in the engagement letter agreement between the Company and the Representative dated June 27, 2014, as amended from time to time). The Advance is not a separate item of compensation and any expenditures under the Advance shall be credited against the expense allowance described in this Section 4(b). Under no circumstances will the Company be obligated to reimburse the Representative for more than \$100,000 of its expenses. Except to the extent otherwise expressly provided for in this Agreement, the Underwriters shall pay their own costs and expenses, including the fees and expenses of their counsel. For purposes of clarity, the underwriter's counsel fees and expenses in connection with the FINRA review as referenced in clause (v) of this section 4(b) are included in the Advance and are not an additional item of value.

(c) The Company acknowledges and agrees that each of the Underwriters has acted and is acting solely in the capacity of a principal in an arm's length transaction between the Company and the Underwriters with respect to the offering of Securities contemplated hereby (including in connection with determining the terms of the Offering) and not as a financial advisor, agent or fiduciary to the Company or any other person. Additionally, the Company acknowledges and agrees that the Underwriters have not and will not advise the Company or any other person as to any legal, tax, investment, accounting or regulatory matters in any jurisdiction. The Company has consulted with its own advisors concerning such matters and shall be responsible for making its own independent investigation and appraisal of the transactions contemplated hereby, and the Underwriters shall have no responsibility or liability to the Company or any other person with respect thereto, whether arising prior to or after the date hereof. Any review by the Underwriters of the Company, the transactions contemplated hereby or other matters relating to such transactions have been and will be performed solely for the benefit of the Underwriters and shall not be on behalf of the Company. The Company agrees that it will not claim that the Underwriters, or any of them, has rendered advisory services of any nature or respect, or owes a fiduciary duty to the Company or any other person in connection with any such transaction or the process leading thereto.

(d) The Company represents and agrees that, unless it obtains the prior consent of the Representative, and each Underwriter represents and agrees that, unless it obtains the prior consent of the Company and the Representative, it has not made and will not make any offer relating to Securities that would constitute an "issuer free writing prospectus," as defined in Rule 433, or that would otherwise constitute a "free writing prospectus," as defined in Rule 405, required to be filed with the Commission. The Company has complied and will comply with the requirements of Rule 433 under the Act applicable to any Issuer Free Writing Prospectus, including timely filing with the Commission where required, legending and record keeping. The Company represents that it has satisfied and agrees that it will satisfy the conditions set forth in Rule 433 of the Rules to avoid a requirement to file with the Commission any Marketing Materials.

#### 5. **Indemnification.**

(a) The Company agrees to indemnify, defend and hold harmless the Underwriters, their respective affiliates, directors and officers and employees, and each person, if any, who controls such Underwriter within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, from and against any losses, claims, damages or liabilities to which such Underwriter or such person may become subject, under the Securities Act or otherwise (including in settlement of any litigation if such settlement is effected with the written consent of the Company), insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon: (i) an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, including the information deemed to be a part of the Registration Statement at the time of effectiveness and at any subsequent time pursuant to Rules 430A and 430B of the Rules and Regulations, or arise out of or are based upon the omission from the Registration Statement, or alleged omission to state therein, a material fact required to be stated therein or necessary to make the statements therein not misleading, (ii) an untrue statement or alleged untrue statement of a material fact contained in the General Disclosure Package, the Prospectus, or any amendment or supplement thereto (including any documents filed under the Exchange Act and deemed to be incorporated by reference into the Registration Statement or the Prospectus), any Issuer Free Writing Prospectus, or the Marketing Materials or in any other materials used in connection with the Offering, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, (iii) in whole or in part, any inaccuracy in the representations and warranties of the Company contained herein, or (iv) in whole or in part, any failure of the Company to perform its obligations hereunder or under applicable law, and will reimburse the Underwriters for its reasonable legal or other out of pocket expenses reasonably incurred by it in connection with evaluating, investigating or defending against such loss, claim, damage, liability or action; provided, however, that (y) the Company will only be obligated to reimburse the Underwriters for the cost and expense of one counsel (in addition to any local counsel) and provided further that the Company will not be liable in any such case to the extent that any such loss, claim, damage, liability or action arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission made in the Registration Statement, the General Disclosure Package, the Prospectus, or any amendment or supplement thereto or any Issuer Free Writing Prospectus, in reliance upon and in conformity with the Underwriter Information and (z) with respect to any untrue statement or omission or alleged untrue statement or omission made in the Preliminary Prospectus, if any, the indemnity agreement contained in this Section 5(a) shall not inure to the benefit of an Underwriter to the extent that any losses, claims, damages or liabilities of such Underwriter results from the fact that a copy of the Preliminary Prospectus was not given or sent to the person asserting any such loss, claims, damage or liability at or prior to the written confirmation of sale of Securities to such person as required by the Securities Act and the rules and regulations thereunder, and if the untrue statement or omission has been corrected in the Prospectus, unless such failure to deliver the Prospectus was a result of non-compliance by the Company with its obligations under this Agreement. This indemnity agreement will be in addition to any liability which the Company may otherwise have.

(b) Each Underwriter, severally and not jointly, agrees to indemnify and hold harmless (i) the Company, and each person, if any, who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act and (ii) each director of the Company, and each officer of the Company who signs the Registration Statement, against any losses, claims, damages or liabilities to which such party may become subject, under the Securities Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in any preliminary prospectus, the Registration Statement or the Prospectus, or any amendment or supplement thereto, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in any Preliminary Prospectus, the Registration Statement, the General Disclosure Package or the Prospectus or any such amendment or supplement in reliance upon and in conformity with the Underwriter Information and will reimburse the Company for any legal or other expenses reasonably incurred by the Company in connection with evaluating, investigating or defending any such action or claim as such expenses are incurred; provided, however, that the obligation of each Underwriter to indemnify the Company (including any controlling person, director or officer thereof) shall be limited to the amount of the underwriting discount and commissions applicable to Securities to be purchased by such Underwriter hereunder.

(c) Any party that proposes to assert the right to be indemnified under this Section will, promptly after receipt of notice of commencement of any action, suit or proceeding against such party in respect of which a claim is to be made against an indemnifying party or parties under this Section, notify each such indemnifying party of the commencement of such action, suit or proceeding, enclosing a copy of all papers served. No indemnification provided for in Section 5(a) or 5(b) shall be available to any party who shall fail to give notice as provided in this Section 5(c) if the party to whom notice was not given was unaware of the proceeding to which such notice would have related and was prejudiced by the failure to give such notice but the omission so to notify such indemnifying party of any such action, suit or proceeding shall not relieve it from any liability that it may have to any indemnified party for contribution or otherwise than under this Section. In case any such action, suit or proceeding shall be brought against any indemnified party and it shall notify the indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate in, and, to the extent that it shall wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with one firm of legal counsel reasonably satisfactory to such indemnified party, and after notice from the indemnifying party to such indemnified party of its election so to assume the defense thereof and the approval by the indemnified party of such counsel, the indemnifying party shall not be liable to such indemnified party for any legal or other expenses, except as provided below and except for the reasonable costs of investigation subsequently incurred by such indemnified party in connection with the defense thereof. The indemnified party shall have the right to employ its counsel in any such action, but the fees and expenses of such counsel shall be at the expense of such indemnified party unless (i) the employment of counsel by such indemnified party has been authorized in writing by the indemnifying parties, (ii) the indemnified party shall have been advised by counsel that there may be one or more legal defenses available to it which are different from or in addition to those available to the indemnifying party (in which case the indemnifying parties shall not have the right to direct the defense of such action on behalf of the indemnified party) or (iii) the indemnifying parties shall not have employed counsel to assume the defense of such action within a reasonable time after notice of the commencement thereof, in each of which cases the fees and expenses of counsel shall be at the expense of the indemnifying parties. An indemnifying party shall not be liable for any settlement of any action, suit, and proceeding or claim effected without its written consent, which consent shall not be unreasonably withheld or delayed. No indemnifying party shall, without the written consent of the indemnified party, effect the settlement or compromise of, or consent to the entry of any judgment with respect to, any pending or threatened action or claim in respect of which indemnification or contribution may be sought hereunder (whether or not the indemnified party is an actual or potential party to such action or claim) unless such settlement, compromise or judgment (i) includes an unconditional release of the indemnified party from all liability arising out of such action or claim and (ii) does not include a statement as to or an admission of fault, culpability or a failure to act, by or on behalf of any indemnified party.

6. **Contribution.** In order to provide for just and equitable contribution in circumstances in which the indemnification provided for in Section 5(a) or 5(b) is due in accordance with its terms but for any reason is unavailable or insufficient to hold harmless an indemnified party in respect to any losses, liabilities, claims, damages or expenses referred to therein, then each indemnifying party shall contribute to the aggregate losses, liabilities, claims, damages and expenses (including any investigation, legal and other expenses reasonably incurred in connection with, and any amount paid in settlement of, any action, suit or proceeding or any claims asserted, but after deducting any contribution received by any person entitled hereunder to contribution from any person who may be liable for contribution) incurred by such indemnified party, as incurred, in such proportion as is appropriate to reflect the relative benefits received by the Company, on the one hand, and the Underwriters, on the other hand, from the Offering pursuant to this Agreement or, if such allocation is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to above but also the relative fault of the Company, on the one hand, and the Underwriters, on the other hand, in connection with the statements or omissions which resulted in such losses, liabilities, claims, damages or expenses, as well as any other relevant equitable considerations. The Company and the Underwriters agree that it would not be just and equitable if contribution pursuant to this Section 6 were determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation which does not take account of the equitable considerations referred to above. The aggregate amount of losses, liabilities, claims, damages and expenses incurred by an indemnified party and referred to above shall be deemed to include any reasonable legal or other expenses reasonably incurred by such indemnified party in investigating, preparing or defending against any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever based upon any such untrue or alleged untrue statement or omission or alleged omission. Notwithstanding the provisions of this Section 6, no Underwriter (except as may be provided in the Agreement Among Underwriters) shall be required to contribute any amount in excess of the underwriting discounts and commissions applicable to Securities purchased by such Underwriter. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. For purposes of this Section 6, each person, if any, who controls an Underwriter within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act shall have the same rights to contribution as such Underwriter, and each director or partner of the Company, each officer of the Company who signed the Registration Statement, and each person, if any, who controls the Company within the meaning of the Section 15 of the Securities Act or Section 20 of the Exchange Act, shall have the same rights to contribution as the Company. Any party entitled to contribution will, promptly after receipt of notice of commencement of any action, suit or proceeding against such party in respect of which a claim for contribution may be made against another party or parties under this Section 6, notify such party or parties from whom contribution may be sought, but the omission so to notify such party or parties from whom contribution may be sought shall not relieve the party or parties from whom contribution may be sought from any other obligation it or they may have hereunder or otherwise than under this Section 6. No party shall be liable for contribution with respect to any action, suit, proceeding or claim settled without its written consent. The Underwriters' obligations to contribute pursuant to this Section 6 are several in proportion to their respective underwriting commitments and not joint.

7. **Termination.**

(a) This Agreement may be terminated with respect to Securities to be purchased on a Closing Date by the Representative by notifying the Company at any time at or before a Closing Date if: (i) any domestic or international event or act or occurrence has materially disrupted, or in the reasonable opinion of the Representative will in the immediate future materially disrupt, the market for the Company's securities or securities in general; (ii) there has occurred any outbreak or material escalation of hostilities or acts of terrorism or other calamity or crisis the effect of which on the financial markets of the United States is such as to make it, in the reasonable judgment of the Representative, inadvisable or impracticable to market Securities or enforce contracts for the sale of Securities; (iii) trading in the any securities of the Company has been suspended or materially limited by the Commission or trading generally on the New York Stock Exchange, the NYSE MKT or the NASDAQ Capital Market has been suspended or materially limited, or minimum or maximum ranges for prices for securities shall have been fixed, or maximum ranges for prices for securities have been required, by any of said exchanges or by such system or by order of the Commission, FINRA, or any other governmental or regulatory authority; (iv) a banking moratorium has been declared by any state or Federal authority; or (v) in reasonable judgment of the Representative, there has been, since the time of execution of this Agreement or since the respective dates as of which information is given in the Prospectus, a Material Adverse Effect, whether or not arising in the ordinary course of business, such as to make it, in the reasonable judgment of the Representative, inadvisable or impracticable to market the Securities or enforce contracts for the sale of the Securities.

(b) If this Agreement is terminated pursuant to any of its provisions, the Company will not be under any liability to any Underwriter, and no Underwriter shall be under any liability to the Company, except that (y) the Company will reimburse the Representative only for all actual, accountable out-of-pocket expenses (including the reasonable fees and disbursements of Harter Secrest & Emery LLP, its counsel) reasonably incurred by the Representative in connection with the proposed purchase and sale of the Securities or in contemplation of performing its obligations hereunder (for purposes of clarity, in the event this Agreement is terminated, the amount of the out-of-pocket accountable expenses that the Company will reimburse to the Representative will be reduced by the amount of the Advance, which includes all of the advances made to the Representative for out-of-pocket accountable expenses), and (z) no Underwriter who shall have failed or refused to purchase Securities agreed to be purchased by it under this Agreement, without some reason sufficient hereunder to justify cancellation or termination of its obligations under this Agreement, shall be relieved of liability to the Company, or to the other Underwriters for damages occasioned by its failure or refusal.

8. **Substitution of Underwriters.** If any Underwriter shall default in its obligation to purchase on any Securities Closing Date agreed to be purchased hereunder on such Closing Date, the Representative shall have the right, within thirty-six (36) hours thereafter, to make arrangements for one or more of the non-defaulting Underwriters, or any other underwriters, to purchase such Securities on the terms contained herein. If, however, the Representative shall not have completed such arrangements within such 36-hour period, then the Company will be entitled to a further period of thirty-six (36) hours within which to procure another party or other parties reasonably satisfactory to the Underwriters to purchase such Securities on such terms. If, after giving effect to any arrangements for the purchase of the Securities of a defaulting Underwriter or Underwriters by the Representative and the Company as provided above, the aggregate number of Securities which remains unpurchased on such Closing Date does not exceed ten percent (10%) of the aggregate number of all Securities that all the Underwriters are obligated to purchase on such date, then the Company shall have the right to require each non-defaulting Underwriter to purchase the number of Securities which such Underwriter agreed to purchase hereunder at such date and, in addition, to require each non-defaulting Underwriter to purchase its pro rata share (based on the number of Securities which such Underwriter agreed to purchase hereunder) of Securities of such defaulting Underwriter or Underwriters for which such arrangements have not been made; but nothing herein shall relieve a defaulting Underwriter from liability for its default. In any such case, either the Representative or the Company shall have the right to postpone the applicable Closing Date for a period of not more than seven days in order to effect any necessary changes and arrangements (including any necessary amendments or supplements to the Registration Statement or Prospectus or any other documents), and the Company agrees to file promptly any amendments to the Registration Statement or the Prospectus which in the opinion of the Company and the Underwriters and their counsel may thereby be made necessary.

If, after giving effect to any arrangements for the purchase of Securities of a defaulting Underwriter or Underwriters by the Representative and the Company as provided above, the aggregate number of such Securities which remains unpurchased exceeds ten percent (10%) of the aggregate number of all Securities to be purchased at such date, then this Agreement, or, with respect to a Closing Date which occurs after Securities Closing Date, the obligations of the Underwriters to purchase and of the Company, as the case may be, to sell the Option Securities to be purchased and sold on such date, shall terminate, without liability on the part of any non-defaulting Underwriter to the Company, and without liability on the part of the Company, except as provided in Sections 4(b), 5, 6 and 7. The provisions of this Section 8 shall not in any way affect the liability of any defaulting Underwriter to the Company or the non-defaulting Underwriters arising out of such default. The term "Underwriter" as used in this Agreement shall include any person substituted under this Section 8 with like effect as if such person had originally been a party to this Agreement with respect to such Securities.

9. **Miscellaneous.**

(a) The respective agreements, representations, warranties, indemnities and other statements of the Company and the several Underwriters, as set forth in this Agreement or made by or on behalf of them pursuant to this Agreement, shall remain in full force and effect, regardless of any investigation (or any statement as to the results thereof) made by or on behalf of any Underwriter or the Company, or any of their respective officers, directors or controlling persons referred to in Sections 5 and 6 hereof, and shall survive delivery of and payment for Securities and the Common Stock underlying the Warrants and Representative's Warrant. In addition, the provisions of Sections 4(b), 5, 6, 7, and 9(a) shall survive the termination or cancellation of this Agreement.

(b) This Agreement has been and is made for the benefit of the Underwriters, the Company, and their respective successors and assigns, and, to the extent expressed herein, for the benefit of persons controlling any of the Underwriters, or the Company, and directors and officers of the Company, and their respective successors and assigns, and no other person shall acquire or have any right under or by virtue of this Agreement. The term "successors and assigns" shall not include any purchaser of Securities from any Underwriter merely because of such purchase.

(c) All notices and communications hereunder shall be in writing and mailed or delivered or by email if subsequently confirmed in writing, (a) if to the Representative, c/o Maxim Group LLC, 405 Lexington Avenue, New York, New York 10174, Attention: Equity Capital Markets, with a copy to Maxim Group LLC, 405 Lexington Avenue, New York, New York 10174, Attention: General Counsel, and to Harter Secrest & Emery LLP, 1600 Bausch & Lomb Place, Rochester, NY 14604, Attention: James M. Jenkins, and (b) if to the Company, to the Company's agent for service as such agent's address appears on the cover page of the Registration Statement with a copy to Fulbright & Jaworski LLP, 666 Fifth Avenue, New York, New York 10103, Attention: Merrill M. Kraines.

(d) **This Agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard for conflict of laws principles.** Each of the parties hereto hereby submits to the non-exclusive jurisdiction of the Federal and state courts in the Borough of Manhattan in The City of New York in any suit or proceeding arising out of or relating to this Agreement or the transactions contemplated hereby. Each of the parties irrevocably and unconditionally waives any objection to the laying of venue of any suit or proceeding arising out of or relating to this Agreement or the transactions contemplated hereby in Federal and state courts in the Borough of Manhattan in The City of New York and irrevocably and unconditionally waives and agrees not to plead or claim in any such court that any such suit or proceeding in any such court has been brought in an inconvenient forum. The parties agree, to the extent permitted by law, to waive their rights to a jury trial in any proceeding arising out of this Agreement.

(e) In connection with this Agreement, the Representative will act for and on behalf of the several Underwriters, and any action taken under this Agreement by the Representative, will be binding on all the Underwriters.

(f) If any term or provision of this Agreement or the performance thereof will be invalid or unenforceable to any extent, such invalidity or unenforceability shall not affect or render invalid or unenforceable any other provisions of this Agreement and this Agreement will be valid and enforced to the fullest extent permitted by law.

(g) The failure of any of the parties hereto to at any time enforce any of the provisions of this Agreement shall not be deemed or construed to be a waiver of any such provision, nor to in any way effect the validity of this Agreement or any provision hereof or the right of any of the parties hereto to thereafter enforce each and every provision of this Agreement. No waiver of any breach, non-compliance or non-fulfillment of any of the provisions of this Agreement shall be effective unless set forth in a written instrument executed by the party or parties against whom or which enforcement of such waiver is sought; and no waiver of any such breach, non-compliance or non-fulfillment shall be construed or deemed to be a waiver of any other or subsequent breach, non-compliance or non-fulfillment.

(h) This Agreement constitutes the entire agreement of the parties to this Agreement and supersedes all prior or contemporaneous written or oral agreements, understandings, promises and negotiations with respect to the subject matter hereof.

(i) In this Agreement, the masculine, feminine and neuter genders and the singular and the plural include one another. The section headings in this Agreement are for the convenience of the parties only and will not affect the construction or interpretation of this Agreement.

(j) This Agreement may be amended or modified, and the observance of any term of this Agreement may be waived, only by a writing signed by the Company and the Representative.

(k) This Agreement may be signed in any number of counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument. Such counterparts may be delivered by facsimile or by e-mail delivery of a "pdf" format data file, which counterparts shall be valid as if original and which delivery shall be valid delivery thereof.

[Signature Page Follows]



Please confirm that the foregoing correctly sets forth the agreement among us.

Very truly yours,

APPLIED DNA SCIENCES, INC.

By: /s/ James A. Hayward  
Name: James A. Hayward  
Title: Chairman, President and Chief Executive Officer

Agreed to and confirmed

**REPRESENTATIVE**

*(acting severally on behalf of itself and as representative of the several Underwriters named on **Schedule I** annexed hereto.):*

MAXIM GROUP LLC

By: /s/ Clifford Teller

Name: Clifford Teller

Title: Head of Investment Banking

**SCHEDULE I**

Underwriters

<b><u>Name</u></b>	<b><u>Number of Securities to be Purchased</u></b>
Maxim Group LLC	2,735,000
Dawson James Securities, Inc.	65,000
<b>Total</b>	<b>2,800,000</b>

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**SCHEDULE II**

Other Written Communications

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**SCHEDULE III**

Lock-up Signatories

James A. Hayward

Yacov Shamash

John Bitzer, III

Karol Gray

Judith Murrah

Charles Ryan

Ben Liang

Sanford R. Simon

Delabarta, Inc.

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**EXHIBIT A**

Form of Lock-Up Agreement

(See Attached)

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CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement of Applied DNA Sciences, Inc. on Form S-8 (File No. 333-182350) of our report dated December 15, 2014 with respect to our audit of the consolidated financial statements of Applied DNA Sciences, Inc. as of September 30, 2014, and for the year ended September 30, 2014, and our report dated December 15, 2014 with respect to our audit of the effectiveness of internal control over financial reporting of Applied DNA Sciences, Inc. as of September 30, 2014, which reports are included in this Annual Report on Form 10-K of Applied DNA Sciences, Inc. for the year ended September 30, 2014.

/s/ Marcum LLP  
Marcum LLP

Melville, New York  
December 15, 2014

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CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (File No. 333-182350) of Applied DNA Sciences, Inc. of our report dated May 1, 2014, except for paragraph 3 to Note B, as to which the date is October 29, 2014, relating to the consolidated financial statements as of and for each of the two years in the period ended September 30, 2013, which appears in this annual report on Form 10-K.

/s/ RBSM LLP

New York, New York  
December 15, 2014

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## CERTIFICATION

I, James A. Hayward, certify that:

1. I have reviewed this Annual Report on Form 10-K of Applied DNA Sciences, 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; and
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: December 15, 2014

/s/ James A. Hayward  
James A. Hayward  
*President, Chief Executive Officer and Chairman*



## CERTIFICATION

I, Karol Kain Gray, certify that:

1. I have reviewed this Annual Report on Form 10-K of Applied DNA Sciences, 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; and
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: December 15, 2014

/s/ Karol Kain Gray  
Karol Kain Gray  
*Chief Financial Officer*

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

In connection with the Annual Report on Form 10-K of Applied DNA Sciences, Inc. (the "Company") for the fiscal year ended September 30, 2014, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, James A. Hayward, President, Chief Executive Officer and Chairman of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ James A. Hayward

\_\_\_\_\_  
James A. Hayward

*President, Chief Executive Officer and Chairman*

Date: December 15, 2014  
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\* A signed original of this written statement required by Section 906 has been provided to Applied DNA Sciences, Inc. and will be retained by Applied DNA Sciences, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

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

In connection with the Annual Report on Form 10-K of Applied DNA Sciences, Inc. (the "Company") for the fiscal year ended September 30, 2014, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Karol Kain Gray, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Karol Kain Gray

\_\_\_\_\_  
Karol Kain Gray  
*Chief Financial Officer*

Date: December 15, 2014  
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\* A signed original of this written statement required by Section 906 has been provided to Applied DNA Sciences, Inc. and will be retained by Applied DNA Sciences, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.