Use these links to rapidly review the document
TABLE OF CONTENTS
METABOLIX, INC. Index to Consolidated Financial Statements

Table of Contents

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 December 31, 2012;

or

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

Commission File Number 001-33133

METABOLIX, INC.
(Exact name of registrant as specified in its charter)

Delaware	**04-3158289**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
21 Erie Street Cambridge, MA (Address of principal executive offices)	**02139** (Zip Code)

(Registrant's telephone number, including area code): **(617) 583-1700**

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	**Name of exchange on which registered**
Common Stock, par value $.01 per share	The NASDAQ Stock Market LLC (NASDAQ Global Market)

Securities registered pursuant to 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 o 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 o 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 o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, 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 o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (Section 229.405 of this chapter) 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. o

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 o	Accelerated filer o	Non-accelerated filer o (Do not check if a smaller reporting company)	Smaller reporting company ☒

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

The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold on the NASDAQ Global Market on June 30, 2012 was $43,387,737.

The number of shares outstanding of the registrant's common stock as of March 22, 2013 was 34,365,227.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's definitive Proxy Statement to be filed with the Securities and Exchange Commission (the "Commission") pursuant to Regulation 14A in connection with the 2013 Annual Meeting of Stockholders to be held on May 30, 2013 are incorporated herein by reference into Part III of this report.

METABOLIX, INC.
ANNUAL REPORT ON FORM 10-K
For the Year Ended December 31, 2012

INDEX

Forward Looking Statements

This annual report on Form 10-K contains "forward-looking statements" within the meaning of 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. In particular, statements contained in the Form 10-K, including but not limited to, statements regarding our future results of operations and financial position, business strategy and plan prospects, projected revenue or costs and objectives of management for future research, development or operations, are forward-looking statements. These statements relate to our future plans, objectives, expectations and intentions and may be identified by words such as "may," "will," "should," "expects," "plans," "anticipate," "intends," "target," "projects," "contemplates," "believe," "estimates," "predicts," "potential," and "continue," or similar words.

Although we believe that our expectations are based on reasonable assumptions within the limits of our knowledge of our business and operations, the forward-looking statements contained in this document are neither promises nor guarantees. Our business is subject to significant risk and uncertainties and there can be no assurance that our actual results will not differ materially from our expectations. These forward looking statements include, but are not limited to, statements concerning: future financial performance and position and management's strategy, plans and objectives for research and development, product development, manufacturing and commercialization of current and future products, including the commercialization of our biopolymer products. Such forward-looking statements are subject to a number of risks and uncertainties that could cause actual results to differ materially from those anticipated including, without limitation, risks related to our limited cash resources, uncertainty about our ability to secure additional funding, dependence on establishing a manufacturing source for our products, risks related to the development and commercialization of new and uncertain technologies, risks associated with our protection and enforcement of our intellectual property rights, as well as other risks and uncertainties set forth below under the caption "Risk Factors" in Part I, Item 1A, of this report.

The forward-looking statements and risk factors presented in this document are made only as of the date hereof and we do not intend to update any of these risk factors or to publicly announce the results of any revisions to any of our forward-looking statements other than as required under the federal securities laws.

Unless the context otherwise requires, all references in this Annual Report on Form 10-K to "Metabolix," "we," "our," "us," "our company" or "the company" refer to Metabolix, Inc., a Delaware corporation and its subsidiaries.

PART I

ITEM 1. BUSINESS

Overview

Metabolix is an innovation-driven bioscience company focused on bringing environmentally friendly solutions to the plastics, chemicals and energy industries. We have core capabilities in microbial genetics, fermentation process engineering, chemical engineering, polymer science, plant genetics and botanical science, and we have assembled these capabilities in a way that has allowed us to integrate our biotechnology research with real world chemical engineering and industrial practice. In addition, we have created an extensive intellectual property portfolio to protect our innovations and, together with our technology, to serve as a valuable foundation for future industry collaborations.

The markets for petroleum-based plastics, chemicals and fuels are among the largest in the global economy. Issues associated with the prolonged use of petroleum-based products include plastic waste management and pollution, limited fossil fuel availability and price volatility, and global warming and climate change. We believe that a substantial global market opportunity exists to develop and

commercialize our technology to produce sustainable, renewable alternatives to petroleum-based products including advanced biopolymers, biobased industrial chemicals and bioenergy.

Metabolix was formed to leverage the ability of natural systems to produce complex biopolymers from renewable resources. We have focused on a family of biopolymers found in nature called polyhydroxyalkanoates, or ("PHAs"), which occur naturally in living organisms and are chemically similar to polyesters. We have demonstrated the production of PHAs at the industrial scale to produce PHA biopolymers and biobased industrial chemicals, as well as proof-of-concept production of PHB, a subclass of PHA biopolymer, in agriculturally significant crop plants.

PHA Biopolymers Platform.

Driven by consumer demand for more sustainable materials, improved performance of bioplastic resins and the availability of commodity plastics produced from biobased sources, the Freedonia Group predicts that global demand for biobased, biodegradable plastics will surpass 1.1 million tons per year by 2015. With our differentiated PHA bioplastic resins, we believe we are a leader in the development of bioplastic materials.

From 2004 through 2011, we developed and began commercialization of our PHA biopolymers through a technology alliance and subsequent commercial alliance with a wholly-owned subsidiary of Archer Daniels Midland Company ("ADM"), one of the largest agricultural processors in the world. Under the commercial alliance, ADM was responsible for resin manufacturing, and Metabolix was primarily responsible for product development, compounding, marketing and sales. Through this alliance, the companies established a joint venture company, Telles, LLC ("Telles"), to commercialize PHA biopolymer products. ADM completed construction of the initial phase of its commercial manufacturing facility, which began production of biopolymers for the joint venture in 2010. Telles conducted significant product and commercial development activities with potential customers, marketed and sold product to customers under the tradenames Mirel™ and Mvera™, and developed a network of business partners and distributors before ADM terminated the commercial alliance early in 2012.

In 2012, our objective was to advance business discussions with third parties with the goal of establishing a new commercial model for our PHA biopolymers, to work closely with our core customers to provide product from existing inventory during the transition phase and ensure ongoing development of PHA biopolymer products, to narrow our market development focus to high value market segments as the foundation to successfully build the business, and to establish a new manufacturing and supply chain properly sized to our business.

After the termination of the Telles joint venture, we retained significant rights and assets associated with the PHA biopolymers business consistent with our intent to launch the business using a new commercial model, continuing business operations, marketing biopolymer products, and identifying alternate manufacturing capability. We hold exclusive rights to the Metabolix technology and intellectual property used in the joint venture. We acquired all of Telles's product inventory and compounding raw materials totaling more than 5 million pounds, all product certifications and all product trademarks including Mirel and Mvera, and we retained all co-funded pilot plant equipment in locations outside of the Commercial Manufacturing Facility in Clinton, Iowa. We have no obligations under the ledger account totaling $433 million which was funded by ADM to construct the Commercial Manufacturing Facility and to provide working capital to Telles.

Through Telles, we learned extremely valuable information about how customers and brand owners are envisioning the use of PHA biopolymers in their products. Based on these interactions, we remain confident that Metabolix biopolymers provide an important solution to those wishing to reduce dependence on petroleum, reduce plastic waste in the environment, and utilize new solutions to meet sustainable packaging goals. We have demonstrated that our biopolymers, marketed under the Mirel

and Mvera brands, share the physical properties of petroleum-based resins for performance and durability and can be processed using existing equipment and post-processing techniques. The difference is that Metabolix biopolymers display unique biodegradability properties. Mirel is certified to biodegrade in soil and water environments, as well as home composting and industrial composting facilities (in areas where such facilities are available). Mvera is a certified compostable film grade biopolymer intended for industrial composting.

After termination of the ADM commercial alliance in early 2012, we restructured the biopolymers business, retaining a core team in our biopolymers group to provide continuity with technology, manufacturing process, and markets. During 2012, we established Metabolix GmbH, a subsidiary located in Cologne, Germany to serve as a focal point for our commercial activities in Europe. This cost effective location is intended to enable us to directly access the European market, which is the largest for bioplastics. We also took steps toward establishing a new commercial model for our PHA biopolymers business. We worked closely with our core customers to supply product from existing inventory as a bridge to new supply. We evaluated the potential applications for our biopolymer products and narrowed our market development focus to three high value market segments, as follows: (i) film and bag applications, (ii) performance additives, and (iii) functional biodegradation. In March 2012, we began directly booking product sales and shipping product from inventory to our customers. During the second half of the year, we developed, sampled and launched two new products: Mvera B5008, a compostable film grade, and I6001, a polymeric modifier for polyvinyl chloride ("PVC"). In addition, we signed an agreement for demonstration production with Antibioticos SA, a toll manufacturer, based in Leon, Spain.

During 2013, we expect to continue to use existing inventory to continue to develop the market and to supply new and existing customers. We continue to explore alternative options to establish a new biopolymer manufacturing and supply chain properly sized to our business.

Biobased Industrial Chemicals Platform.

The combined global market for conventional four-carbon ("C4") and three-carbon ("C3") industrial chemicals is estimated at more than $10 billion annually. C4 chemicals are used in applications ranging from high-performance engineering plastics to spandex. C3 chemicals have applications in paints, coatings, diapers and adhesives.

We have developed technology for producing C4 and C3 chemicals from biobased sources, not the fossil feedstocks that are currently used to produce most industrial chemicals today. We believe that, by using renewable feedstocks in a patented microbial fermentation process, our technology platform will enable cost-effective production of biobased chemicals as "drop in" replacements for petroleum-based products.

Our process for creating biobased industrial C4 and C3 chemicals involves engineering metabolic pathways into microbes that, in a fermentation process, produce specific PHA structures that serve as precursors for the chemicals. Through our PHA technology, we are able to control the microbe biology to achieve high concentrations of specific, naturally-occurring PHA that accumulate inside cells as they metabolize sugars. This intracellular accumulation of the biopolymers inside the microbes is a unique and differentiating aspect of our technology. When the fermentation is completed, we use a novel internally developed recovery process known as "FAST" (fast-acting, selective thermolysis) that converts the biopolymer to the target chemical using heat.

During 2009, we completed all work under our U.S. Department of Commerce National Institute of Standards and Technology grant, a $2 million grant aimed at producing C4 chemicals from renewable sources. We were able to achieve all of the technical milestones outlined in this grant. In 2010, we continued to scale up our C4 chemicals technology and continued efforts on chemical recovery and purification. We made progress toward production of biobased gamma-butyrolactone

("GBL") samples for shipment to potential customers and we expanded exploratory partnership discussions.

In 2011, we entered into a joint development agreement with CJ CheilJedang ("CJ") to continue to advance and refine our production technology and assess investment options for the commercialization of biobased C4 chemicals via fermentation. During this collaboration, we developed a detailed market and economic analysis examining all aspects of an investment to commercialize biobased C4 chemicals.

In the C4 program, we have produced GBL at industrial scale and demonstrated a chemical profile that meets or exceeds the existing industrial specifications. In 2012, we completed the preliminary design for a commercial scale plant to enable production of biobased GBL and, through an established conversion process, butanediol ("BDO"). This plan, which could be implemented under a potential future collaboration, includes specifications for all of the components of our fermentation and recovery process. In conjunction with our technical progress, we expect to continue discussions with industry leaders with the goal of forming the industry alliances necessary to successfully bring our biobased C4 industrial chemicals, including GBL and BDO, into commercial production.

We believe that developing and commercializing biobased C3 chemicals could represent another attractive market for our technology. In 2011, we undertook a market analysis of the global market for acrylic acid, a C3 chemical, to assess the market participants, renewable technology competition, economics, intellectual property status, and end markets.

In 2012, we continued scale up of fermentation and optimization of microbial strains to produce biobased C3 chemicals. We also successfully scaled up recovery of acrylic acid from dried biomass using the "FAST" process in our Cambridge laboratory. We also provided sample quantities of dried biomass for conversion to biobased acrylic acid for customer evaluation. We believe that strategic alliances will be required to commercialize C3 chemicals, and in 2013, we expect to continue to engage in partnership discussions.

Crops Platform.

We are harnessing the renewable nature of plants to make bioplastics, renewable chemicals and bioenergy from crops. The focal point of our plant technology efforts is around polyhydroxybutyrate (PHB), the simplest member of the broad polyhydroxyalkanoate (PHA) family of biopolymers. While applications for PHAs have focused mainly on their use as biodegradable bioplastics, these polymers have a number of other unique features that will allow their use in other applications, such as the production of chemical intermediates and their use as value-added animal feeds. We are creating proprietary systems to produce PHB in high quantity in the leaves of biomass crops or seeds of oilseed crops for these multiple applications.

Our work in crops highlights our leading edge capabilities and research targeting multi-gene expression and transformation of plants. Researchers at Metabolix have designed novel, multi-gene expression systems to increase production of PHB in plant tissue. The science behind this shift in metabolism is complex since the goal is to significantly increase production of PHB to be viable at industrial scale without impairing the ability of the plant to thrive in its natural environment. Using tobacco as a demonstration system for proof of concept, our researchers have published results demonstrating that production of high levels of PHB, up to 18% in leaves and 9% in the biomass of the entire tobacco plant, can be achieved. In addition to tobacco, we are developing different genetic engineering systems for different plant crops including switchgrass, oilseeds and sugarcane.

- **Switchgrass,** a high yielding, warm season, perennial grass that is indigenous to North America, holds promise as a crop to target for commercial PHB production. The renewable fuels industry is showing a high level of interest in switchgrass as an attractive biomass to energy crop for

cellulose-derived production of ethanol and other biofuels. We are engineering switchgrass to produce PHB in the leaves of switchgrass for use either in bioplastics, or as a precursor to industrial chemicals.

- **Camelina** is an industrial oilseed crop that has been introduced to the high plain regions of Canada and parts of the United States. Due to the high oil content (~35%) of its seeds, its frost tolerance, short production cycle (60-90 days), and insect resistance, it is receiving considerable attention as a platform for the production of industrial products. We are conducting research to develop an advanced, genetically modified, camelina for co-production of bioplastics along with vegetable oil, biodiesel fuel, and/or oleochemicals. In 2010, we established Metabolix Oilseeds, Inc., a research company in Saskatchewan, Canada to further pursue our research with industrial oilseed crops.

- **Sugarcane** is a high yielding biomass crop that grows well in tropical climate zones including South America, Australia, parts of Asia, and select temperate regions in the U.S. Due to its high biomass production, it is a suitable target for co-production of bioplastics with sugar and lignocellulosic material that can be used for the production of liquid fuels. We are collaborating with the Australian Research Council to further pursue our research to maximize bioplastic production in the leaf tissue of sugarcane.

In 2011, Metabolix was awarded a $6 million grant by the U.S. Department of Energy ("DOE") to engineer switchgrass producing 10 percent PHB, by weight, in the whole plant and to develop methods to thermally convert the PHB-containing biomass to crotonic acid and a higher density residual biomass fraction for production of bioenergy. Crotonic acid is a platform chemical that can be readily converted through simple, known chemical conversion steps to a range of commodity chemical intermediates including propylene, butanol and maleic anhydride.

In 2012, Metabolix was awarded three new grants for leading-edge crop research targeting multi-gene expression and transformation of plants including important biofuel and food crops. Funding from these three grants is expected to total approximately $1.0 million and will run through 2014.

In 2013, we expect to continue to advance research under our grants, focused on increasing PHB production in switchgrass and developing a thermal conversion process for crotonic acid. We may also seek to establish alliances with partners to commercially exploit this platform. We are in the process of capturing intellectual property gained in our work in crops and will be evaluating the possibilities of monetizing that intellectual property.

We are developing an extensive portfolio of intellectual property covering our inventions in crop-based technology and have been awarded more than 30 patents in this area to date. In addition, Metabolix researchers and academic collaborators have published our research results in peer reviewed scientific journals.

Market Opportunity

Our targeted markets of plastics, chemicals and energy offer substantial opportunity for innovation and value creation. These are all very large markets facing substantial pressures to reduce energy consumption, greenhouse gas emissions and the overall impact on the environment. The limited long-term availability of fossil fuels and volatile oil prices are driving the demand for more sustainable alternatives in plastics manufacturing, chemicals and energy.

The Plastics Market

The world's annual consumption of plastic materials has increased from around 5 million tons in the 1950's to nearly 240 million metric tons today and is estimated to be $0.5 trillion in size. Durability and lightweight properties, as well as a number of applications from packaging to engineering-grade

automotive materials, continue to drive this exponential growth in the plastics market. However, a majority of plastics are made from fossil feedstocks, including crude oil and natural gas. This reliance on fossil fuels ensures that plastic pricing is impacted by fluctuations in the cost of natural resources. A more concerning issue is that these fossil feedstock-based plastics do not biodegrade and congest landfills. According to the U.S. Environmental Protection Agency, an estimated 31 million tons of plastic entered the U.S. municipal solid waste stream in 2010. It is estimated that 20-25 percent of landfill weight is plastics. In addition, every year approximately 45,000 tons of plastic waste ends up in the world's oceans.

While recycling estimates for certain products such as PET plastic water bottles fluctuates around 20 percent, only 8 percent of the total plastic waste generated in 2010 was recovered for recycling. Plastic water bottles are also the fastest growing form of municipal solid waste in the United States. More than 4 billion pounds of PET plastic bottles end up in landfills or as roadside litter. This puts a tremendous strain on overflowing landfills and introduces environmental concerns that were not present 50 years ago. These issues are driving increased consumer and business demand for biodegradable plastic alternatives. In addition, many plastic items, particularly single use items such as bottles and caps, cups, lids and straws, and grocery bags, become litter in the environment where they can become a significant problem. Plastic waste can create a significant monetary burden on state and local governments.

According to the Freedonia Group, global demand for biobased and biodegradable plastics will more than triple to over 1.1 million tons by 2015. The Freedonia Group cites consumer preferences for more sustainable materials, improved performance of bioplastic resins and commodity plastics produced from biobased sources as the key factors driving this growth. According to the consulting firm, Industry Experts, the global bioplastics market was estimated at 264 thousand metric tons in 2007 and is expected to reach 1.9 million metric tons by 2017, growing by a compound annual growth rate ("CAGR") of 22 percent during that ten-year period.

Market research institute Ceresana predicts that the global bioplastics market will reach revenues of more than $2.8 billion in 2018, reflecting average annual growth rates of 17.8 percent. According to Ceresana, Europe was responsible for about 48 percent of the market in 2010, followed by North America and Asia-Pacific. This is effectively four times the size of the market in 2007. Strong growth is also predicted for South America as a result of production increases in Brazil. In 2010, starch-based bioplastics accounted for the majority of bioplastic demand, followed by polylactic acid ("PLA"). Other biobased plastics, such as PHA/PHB, cellulose, polybutylene succinate ("PBS") and fossil fuel-based biodegradable plastics represented approximately 17 percent of global bioplastic demand. Ceresana expects non-biodegradable plastics made from renewable feedstocks to increase their market share from the eight percent seen in 2010 to more than 48 percent by 2018.

The growth in plastic use has generally exceeded overall economic growth as plastics have entered new markets with new product applications based on their functionality and ability to meet user requirements. The market will continue to investigate and adopt more sustainable resin alternatives to produce plastic products from blow-molding, thermoforming, and film-grade and other manufacturing processes.

The Chemicals Market

There are a large number of chemicals products which enable the manufacture of most industrial and consumer goods ranging from automobiles to food packaging. Major chemicals products include building block chemicals, such as ethylene and propylene, and specialty chemicals such as lubricating oil enhancers and pharmaceutical intermediates. The vast majority of chemicals produced today use non-renewable resources such as oil, natural gas or coal as their basic raw material.

Under the umbrella of the global chemicals market are conventional C4 and C3 industrial chemicals, with an estimated market of more than $10 billion annually.

The C4 chemical market is estimated at approximately $3 billion, growing at approximately four percent annually. C4 chemical products are used in a wide range of applications including engineering plastics, fabrics and fibers, personal care products and in semiconductor manufacturing. Conventional C4 chemicals are produced almost entirely from fossil-based hydrocarbons such as natural gas, oil or coal. Today, there are only testing and sample quantities of biobased C4 chemicals on the market.

Global demand for C3 chemicals is estimated at greater than $8 billion per year based on sales of nine billion pounds annually, and the global market is projected to grow at a rate of approximately five percent per year driven by increasing demand in Asia, including China and India. Conventional C3 chemicals, including crude acrylic acid, glacial acrylic acid and acrylates, are used in products such as superabsorbent polymers ("SAPs"), water treatment chemicals, coatings (decorative, automotive, and paper) and adhesives.

Due to the volatility of fossil feedstocks and demand for renewable solutions from brand owners and consumers, the market is currently experiencing an increased demand for biobased chemicals. In fact the global biobased chemicals market is predicted to grow to more than $76 billion in 2015 from $36.9 billion in 2009, with a CAGR of 12.67 percent from 2010 to 2015.

Escalating prices for both acrylic acid and its main feedstock propylene affect the economics of producing C3 chemicals, driving increased interest in new, renewable alternatives. These new processes aim to reduce or contain costs and to uncouple production from the volatility of petroleum markets.

Regulatory mandates and government policies are driving market adoption of biobased C4 and C3 chemicals into the industrial chemical supply chain. Growing awareness among both manufacturers and consumers for products containing renewable content may also become an increasingly important factor in driving conversion to biobased chemicals over the long run.

Fuels and Bioenergy Markets

The issues surrounding petroleum previously discussed have given rise to increasing demand for fuels produced from renewable sources. Certain states are considering legislation to capitalize on the environmental and energy security benefits of renewable fuels by requiring their use.

In December 2007, President Bush signed into law H.R. 6, the "Energy Independence and Security Act," which includes a historic Renewable Fuels Standard ("RFS") calling for at least 36 billion gallons of ethanol to be used nationwide by 2022; an increase from the nine billion gallons of ethanol used in 2008. This long-term growth plan for ethanol is intended to spur its commercialization from cellulosic feedstocks such as switchgrass, crop residues, forestry waste, and many other materials from all regions of the country. Beginning in 2016, an increasing portion of renewable fuels must be advanced biofuels, starting at three billion gallons in 2016 and increasing to 21 billion gallons in 2022. The National Commission on Energy Policy estimates that the new RFS and the increased fuel efficiency standards in the law will reduce domestic oil use by more than four million barrels per day by 2030.

While ethanol is typically produced from starch contained in grains such as corn and grain sorghum, it can also be produced from cellulose. Cellulose is the main component of plant cell walls and is the most common organic compound on earth. The production of ethanol from corn is a mature technology that is not likely to see significant reductions in production cost. The ability to produce ethanol from low-cost biomass will be an important factor in making it competitive as a gasoline additive.

According to Pike Research, the global production and consumption of biofuels will more than double in the next decade, from $82.7 billion in 2011 to $185.3 billion in 2021. With the increasing worldwide demand for fuels from renewable sources and the emerging demand for renewable plastics, chemicals and chemical intermediates, there is a long term opportunity to create an alternative to the petroleum model based on the co-production of renewable energy and chemicals from crops. The commercialization of renewable fuel and chemicals co-produced in proprietary crops could create renewable plastics, chemicals and biofuel with favorable economics.

Formation of Metabolix

Metabolix was formed in 1992 to leverage the ability of natural systems to produce complex polymers from renewable resources as a means to serve the growing needs of society for plastic materials and chemicals without dependence on finite fossil resources.

Polymers are found in nature in a wide range of organisms including microbes, plants and animals. Polyhydroxyalkanoates ("PHAs") also naturally occur within certain organisms, including microbes. These microbes use PHA to store energy and consume it for food when needed. It is this characteristic that gives our PHA biopolymers their biodegradability.

Though PHA polymers are found in nature, their production in wild-type bacterial strains is inefficient and costly for commercial purposes. In 1981, Imperial Chemical Industries ("ICI") developed a controlled fermentation process using a wild-type bacterial strain to produce a PHA copolymer that they introduced under the trade name Biopol. While a handful of applications were developed for Biopol, the cost to produce the polymer using the naturally occurring bacterial strains that were available at the time was prohibitively high and its performance properties were limited. Commercialization was not possible, but the Biopol assets remained largely intact and were eventually sold to Monsanto, Inc.

By the late 1980s, tools for genetic engineering had advanced significantly, and microbes were already being genetically designed to produce various products, such as protein drugs. At the Massachusetts Institute of Technology, Dr. Oliver Peoples, our Chief Scientific Officer, working in the lab of Dr. Anthony Sinskey, a member of our Board of Directors, identified the key genes required for the biosynthesis of our PHA biopolymers and invented and patented the first transgenic systems for their production. The use of genetically engineered production organisms, instead of wild-type strains, broadly expanded the number of compositions that could be made and enabled the tight level of control and high efficiency and productivity that are required for cost-effective industrial manufacturing.

Metabolix was formed in 1992 to exploit these discoveries. In order to fully capture the opportunity, we acquired Monsanto's patent estate related to biobased plastics, which included the Biopol assets, in 2001. We have since fully developed an integrated manufacturing process using transgenic strains for fermentation and a proprietary recovery process. This integrated manufacturing process is available for use in commercial manufacturing going forward. We have also developed proprietary plastic formulation technology, and we are also developing our platform technology for co-producing plastics, chemicals and energy in crops such as switchgrass, oilseeds and sugarcane. In addition, we are applying our proprietary technologies to our industrial biobased chemicals platform.

Our Technology and Core Capabilities

We believe we have one of the most advanced capabilities to perform metabolic pathway engineering in the world and that we are skilled in our ability to integrate the biotechnology we develop into large scale industrial production processes. We believe that we have unprecedented capabilities with respect to harnessing the metabolic pathways involved in the production of a wide range of bioplastic monomers and the ability to polymerize, accumulate and harvest these bioplastics

from living cells. We believe that we are developing key capabilities in the areas of biopolymer product development and customer technical service support.

We have demonstrated that our technology and core capabilities enable us to:

- design and engineer living organisms to perform a series of chemical reactions that convert a feedstock to an end product in a highly efficient and reliable manner;
- integrate that organism into a reliable, large scale industrial fermentation process;
- develop highly efficient recovery technology for the product;
- tailor our end product from that process to suit our customers' needs;
- develop new applications and commercial opportunities for these products;
- develop new formulations and compounds of these products; and
- provide sales and technical service support to our customers.

Product Development Process

Biology and Genetic Engineering

While most biotechnology products today involve identifying a single gene to produce one protein, we have identified and chromosomally inserted a series of genes to produce several proteins and have done so in such a way that they are expressed to execute the right reactions at the right times. This work is at the forefront of a scientific discipline referred to as "Synthetic Biology" which has become the focus of intense research and design activities. There have been many new entrants, both academic and venture-backed start-up companies, in this general field primarily targeting biofuels, either advanced cellulosic ethanol or next generation technologies. We believe that we have advanced capabilities based on over 20 years of development taking early stage gene/pathway discovery through the entire value delivery chain to a commercially viable technology and business. In addition, we have developed core competencies in plant science, plant transformation and the development of advanced multigene expression technologies for introducing novel, multiple trait synthetic pathways into biomass plant crops.

Industrial Fermentation Process Engineering

We have tightly integrated our fermentation scale-up research capabilities with our genetic engineering capabilities to create a feedback loop where data from fermentation experiments can readily influence microbial design and where microbial engineering approaches can guide the fermentation group to structure the optimal protocols (recipes) for running fermentations. Based on this technology we have demonstrated the ability to produce a range of different biopolymers on a common fermentation platform.

Chemical Process Engineering

Another element of our product development process involves process chemistry and chemical engineering to separate the biopolymer from the biological cell material once fermentation is complete. We have a dedicated team that has developed a proprietary process for recovery of PHA biopolymer at the industrial scale. We have invented a recovery process that produces PHA biopolymer at a high level of purity without damaging the structure of the polymer and has operated effectively at a commercial scale in the manufacture of Mirel. We have successfully demonstrated our ability to efficiently isolate the range of polymers necessary to meet and expand our range of target applications. These polymers can be routinely produced free from cell debris and processed into resin pellets.

Our capabilities in fermentation and recovery for producing PHA biopolymer, including Mirel, have been successfully translated to the development of biobased industrial chemicals. We have demonstrated fermentation at pilot and industrial scale and recovered GBL using a proprietary thermolysis process in tonnage quantities. When fermentation is completed, our novel recovery process known as "FAST" (fast-acting, selective thermolysis) converts the biopolymers, poly-4-hydroxybutrate ("P4HB") for C4 chemicals, poly-3-hydroxyproprionate for C3 chemicals, directly to GBL and acrylic acid, respectively. The FAST recovery process is a proprietary, low-cost, energy-efficient approach to recover high-purity biobased chemicals directly from dried or whole fermentation broth. We believe our technology is differentiated and that it allows diversification of feedstock from existing fossil sources to renewable sources and this will offer cost advantages. For chemicals, we are tailoring products and purity levels to meet customer and market needs.

Polymer Science and Product Development

In the area of PHA biopolymers (Mirel and Mvera) our product development process involves tailoring the polymer to provide the product properties and meet the processing requirements for specific customer applications and then compounding that material for delivery to customers. Our product development team has considerable expertise in polymer science and to date has developed advanced formulation and processing technology for injection molding, blown and cast film, sheet, and thermoforming. We have also moved blow molding, non-wovens and foam applications beyond the proof of concept stage. We will continue to work with customers to optimize formulations to conform to their commercial specifications as commercialization of our PHA biopolymers expands.

In sum, we have successfully integrated capabilities in biology, genetics, fermentation process engineering, chemical engineering and polymer science. We believe this integrated set of capabilities will be a source of competitive advantage. These same capabilities are being applied to our plant crop programs, where we intend to develop an industrial system to co-produce bioplastics or chemicals with cost advantaged biomass for bioenergy, and to our integrated bio-engineered chemicals program. We believe our capabilities can also be applied successfully to other biobased plastics, chemicals and energy projects.

Business Strategy

Our goal is to be the leader in discovering, developing and commercializing economically attractive, environmentally sustainable alternatives to petroleum-based plastics, chemicals and energy. To achieve this goal, we are building a portfolio of programs that we believe will not only provide an attractive slate of commercial opportunities and create value for our business, but will also generate leading and competitive intellectual property positions in the field. Key elements of our strategy include:

Creating a Product Portfolio of PHA Biopolymers—Our strategy is to establish our position in the market with premium priced products that address specialized segments that can be served competitively by the distinctive properties of biopolymers. Through several years of interaction with customers, we have developed formulations of our polymer suitable for injection molding, blown and cast film, sheet and thermoforming. There is the potential to refine these grades further and to tailor them for specific customer performance requirements and applications. In addition, our technology may allow us to develop new formulations and processing protocols to extend the use of Mirel and PHA polymers into blow molding, non-woven, foam and latex applications.

Establishing a Supply Chain for our PHA Biopolymers Business—We continue to evaluate a number of manufacturing and supply options that would enable us to build capacity in conjunction with growing customer demand. We are considering options for small-scale, short-term toll manufacturing to scale up our improved technology and products, and intermediate-scale production to build the market for those

products, with a long-term goal of establishing world-scale cost-effective manufacturing. Our commercial strategy is to build a presence in key markets that will enable us to base-load a future low-cost plant.

Continuing Microbial Research and Process Development—We have identified opportunities to improve our production strains and our fermentation and recovery processes. We believe that significant reductions in the operating and capital cost to manufacture Mirel biopolymers can occur as we successfully exploit these opportunities. We also believe that our technology is robust and we expect to be able to successfully transfer our technology to commercial scale production on an ongoing basis.

Managing Existing Inventory—We expect to work closely with core customers to provide them with access to existing inventory as new manufacturing and supply chain are established. We will also use some inventory to continue certain product development activities representing high value applications for our product. Use of purchased material from third parties for blending and property enhancement will allow us to leverage the value of our existing inventory as well as to further tailor products to meet customer needs.

Market Positioning and Technical Support—We have refocused our technical and business development team to support existing customers and to educate and develop the prospective customer base for our Mirel and Mvera biopolymer products. This team is focused on positioning our biopolymers as premium priced, specialty materials that are environmentally attractive alternative to petroleum-based plastics and lower performance bioplastics. The focus of this effort is to build a pipeline of customers across a range of applications. It is our goal to establish customer relationships that will lead to a committed stream of demand for our biopolymers as we establish a new manufacturing supply chain.

Extending Our Technology to Sustainable Production of Biobased Chemicals and Intermediates —We believe that our technical capabilities can be applied to produce important biobased commercial chemicals and chemical intermediates through biological conversion of sustainable feedstocks such as sugars. Through our integrated bio-engineered chemicals program, we have conducted research into the development of sustainable solutions for chemicals and intermediates, including widely used C4 and C3 industrial chemicals. Our unique FAST process enables very efficient recovery of targeted molecules based on our PHA technology. We are seeking to establish strategic partnerships or other collaborations to advance commercialization of these programs.

Advancing Plant Crop Research—We believe that we are pioneering the technical process of introducing multigene traits into plant crops for the production of plastics and chemical intermediates directly in the plant. Our plant crop platform is currently in the research phase. We are in the process of capturing intellectual property gained in our work in crops and will be evaluating the possibilities of monetizing that intellectual property, while we continue work in plant crops under government grants.

Partnering our Programs—As appropriate, we may seek to leverage our technology and establish strategic partnerships with one or more industry leading companies that can provide access to resources and infrastructure valuable for commercializing our plant crop and industrial chemicals platforms. These partnerships may take the form of large-scale strategic collaborations, or more limited collaborations with partners having complementary strengths, for example in biorefinery operations or marketing. We will also continue to seek funding through government grants or other government programs aimed at promoting development of biobased plastics and fuels.

Furthering our Leading and Competitive Intellectual Property Position—We have built a patent estate around our platform technologies and a variety of inventions relevant to the commercialization of PHA biopolymers including Mirel and Mvera. We continue to extend this patent estate within our core business as well as within other commercial opportunities in the area of biobased plastics, chemicals

and energy. We have licensed our technology, and where appropriate, we will continue to license our intellectual property to others in fields outside our areas of interest. Some of the areas in which we may seek to establish leading and competitive intellectual property include:

- intermediates and chemicals produced by microbial fermentation;
- plant varieties to co-produce plastics and energy (e.g., ethanol and biodiesel); and
- plant strains that optimize crop yields and processing traits for conversion to energy.

Building Governmental Awareness of Our Approach—Policy makers are seeking opportunities to reduce dependence on imported fossil fuel, decrease carbon dioxide emission, and address landfill and pollution issues. In recent years, we worked closely with several groups and individuals in the United States and Europe to address these issues. We intend to continue to pursue our governmental affairs initiatives to raise awareness of our solutions and enable legislation that can facilitate and accelerate the adoption of our products.

PHA Biopolymers Platform

Overview

Following the termination of our commercial alliance with ADM early in 2012, we restructured the biopolymers business, retaining a core team in our biopolymers group to provide continuity with technology, manufacturing process, and markets. We worked closely with customers during this transition to understand their product needs and to match them to available inventory. In addition, we held constructive discussions with various potential manufacturing and commercialization partners for PHA biopolymers. Establishing a new manufacturing and supply chain for our PHA biopolymers business is a key focus for us. In 2013, we expect to continue to develop our customer base using existing inventory and to transition to new supply, while we continue to explore alternative options to establish a new biopolymer manufacturing and supply chain properly sized to our business.

Former Alliance with Archer Daniels Midland Company

From 2004 through 2011, we developed and began commercialization of our PHA biopolymers through a technology alliance and subsequent commercial alliance with ADM Polymer Corporation, a wholly-owned subsidiary of ADM, one of the largest agricultural processors in the world. The Commercial Alliance Agreement between Metabolix and ADM Polymer specified the terms and structure of the alliance. The agreement governed the activities and obligations of the parties to commercialize PHA biopolymers, which have been marketed under the brand names Mirel™ and Mvera™. These activities included the establishment of a joint venture company, Telles, to market and sell PHA biopolymers, the construction of a manufacturing facility capable of producing 110 million pounds of material annually (the "Commercial Manufacturing Facility"), the licensing of technology to Telles and to ADM, and the conducting of various research, development, manufacturing, sales and marketing, compounding and administrative services by the parties.

Telles was formed to: (i) serve as the commercial entity to establish and develop the commercial market for PHA biopolymers, and conduct the marketing and sales in accordance with the goals of the commercial alliance, (ii) assist in the coordination and integration of the manufacturing, compounding and marketing activities, and (iii) administer and account for financial matters on behalf of the parties. Metabolix and ADM each had a 50 percent ownership and voting interest in Telles.

Under the Commercial Alliance Agreement ADM was permitted, under limited circumstances, to terminate the alliance if a change in circumstances that was not reasonably within the control of ADM made the anticipated financial return from the project inadequate or too uncertain. The agreement provided that, upon termination by ADM due to a change in circumstances, Metabolix would be

permitted to continue to produce and sell PHA biopolymers, and ADM would be required to perform manufacturing services for the Company for a period of time following the termination (subject to certain payment obligations to ADM). On January 9, 2012, ADM notified us that it was terminating the commercial alliance effective February 8, 2012. ADM had undertaken a strategic review of its business investments and activities and made the decision to focus resources outside of Telles. As the basis for the decision, ADM indicated to us that the projected financial returns from the alliance were too uncertain.

The Commercial Alliance Agreement with ADM limited the rights of both ADM and Metabolix to work with other parties or alone in developing or commercializing certain PHAs produced through fermentation. These exclusivity obligations ended upon termination of the alliance. Also, upon termination of the alliance, Metabolix intellectual property licenses to ADM Polymer and Telles ended, with Metabolix retaining all rights to its intellectual property. ADM retained its Commercial Manufacturing Facility located in Clinton, Iowa, previously used to produce PHA biopolymers for Telles.

After termination of the Commercial Alliance Agreement, the parties entered into a Settlement Agreement in which the parties agreed to specific terms related to the winding up and dissolution of Telles. Under this Settlement Agreement, we purchased certain assets of the joint venture for $2,982,000 including Telles's entire inventory, exclusive and perpetual rights to all of Telles's trademarks, and all product registrations, certifications and approvals for Telles's PHA biopolymers. Pursuant to the Settlement Agreement, ADM relinquished any claims with respect to certain co-funded equipment previously acquired by Metabolix and situated at locations other than the Clinton, Iowa Commercial Manufacturing Facility, and Metabolix and Telles waived any rights to post-termination manufacturing and fermentation services under the Commercial Alliance Agreement.

Current Capabilities and Scope of our Operating Business in PHA Biopolymers

In the first quarter of 2012, we restructured the biopolymers business, retaining a core team in our biopolymers group to provide continuity with the technology, manufacturing process and markets. This team has expertise in the key areas required to maintain and grow an operating business. We have established a subsidiary located in Cologne, Germany to serve as a focal point for commercial activities in Europe and have begun hiring additional staff for our sales and technical support team. We have continued to work closely with customers during this transition to understand their product needs and to match them to available inventory. After the completion of the Telles wind-up arrangements, we had more than 5 million pounds of inventory. Our current estimates indicate that we have adequate inventory to supply the needs of strategic customers as we transition to a new supply source.

We plan to continue to build our supply chain. During 2012 we signed an agreement for demonstration production with Antibióticos SA, a toll manufacturer based in Leon, Spain. Under this agreement, technology transfer to Antibióticos is essentially complete. However, we are aware that Antibióticos is in a process of financial restructuring, and our ability to obtain biopolymer product from Antibióticos will depend on the outcome of that restructuring. Through our engagement with Tianjin GreenBio as a PHA supplier, we believe that we will have the potential to develop and commercialize additional PHA biopolymer products. In addition, we have initiated a feasibility study to define our priorities for a low-cost manufacturing site for long-term commercial scale production of biopolymers and potentially biobased chemicals.

We believe we are well positioned to launch the PHA biopolymers business under a new commercial model based on several key factors with the objective of creating a high margin, high growth business opportunity.

PHA Biopolymers Business	Metabolix 2013 and Beyond
Customers and Markets	Focus on strategic customers and high margin segments as foundation for business
Initial Manufacturing Scale	Targeting 10 kilotonnes annually, then expand capital investment and capacity according to demand
Business Partners	Ability to engage multiple partners
Technology Base	Opportunity to deploy state-of-the-art technology with improved yield and recovery processes
Value Chain	Potential to create integrated chain controlled by Metabolix, potentially with chemicals integration

Mirel biopolymers were produced successfully at industrial scale for two years under the joint venture with ADM. The product was produced at very high quality and in a targeted range of grades suited to different customer uses. Going forward, we see the potential to deploy our latest technology into industrial production at an initial scale that is well matched to customer demand, and to develop plans to grow capacity in tandem with the growth outlook for our markets. In addition, we marketed Mirel biopolymers for more than two years on behalf of Telles and demonstrated market acceptance and the brand value proposition with over 50 customers. We have a highly differentiated technology resulting in a premium product with the proven ability to price at over $2.25 per pound and higher, depending on the application and market. Going forward, we anticipate our marketing and product development activities initially focusing on three areas to provide high value material to customers in key markets (i) film and bag applications (ii) performance additives and (iii) functional biodegradation.

The Value Proposition of Mirel Biopolymers

We believe Mirel biopolymers offer the broadest potential range of properties and processing options compared to today's existing bioplastics. We believe Mirel's unique combination of being both biobased and biodegradable while having comparable functional properties to petroleum-based polymers stands alone in the bioplastics marketplace. We are positioning Mirel biopolymers as a specialty material that can serve conventional plastic functional needs (which petroleum-based polymers may satisfy), deliver new functionality that can be leveraged to reduce system costs (e.g. new end-of-life solutions based on broad biodegradability) in addition to satisfying consumer preference for environmental responsibility (which petroleum-based polymers cannot address). Consequently, we expect to price Mirel at a premium as a specialty product as compared to the price of large volume commodity polymers, but comparable to a number of specialty polymers. Our strategy is to enter the market with premium priced products that address specialized segments that can be served competitively by the distinctive properties of Mirel biopolymers. Mirel biopolymers can be produced in pellet form (for further processing and re-sale as finished goods or components by customers), in densified form and as a blend with other biodegradable materials, and we may also provide Mirel biopolymers in other forms as may be determined by our customers.

We believe that the principal advantages of Mirel biopolymers will be the ability to use renewable feedstocks and the biodegradability properties of the materials combined with their performance when compared to alternative products. We believe Mirel biopolymers are unique compared with other biodegradable (both petroleum and renewable resource based) plastics when evaluated based on the following factors:

Biodegradability—Mirel biopolymers will biodegrade due to the action of microbial agents in a wide variety of conditions, including home and industrial compost systems, soil, anaerobic environments such as those found in anaerobic digesters and septic systems, and marine and fresh water environments. The rate and extent of Mirel's biodegradability will depend on the size and shape of the articles made from it as well as the specific end-of-life environment. However, like all bioplastics and organic matter, Mirel biopolymers are not designed to biodegrade in conventional, non-active landfills. Many plastics marketed as biodegradable only degrade in a controlled municipal industrial compost facility.

Biobased Feedstocks—Because fossil feedstocks are the primary raw material for the plastics industry, prices of conventional polymers can be adversely affected by fossil fuel supply disruptions and price volatility. Mirel biopolymers are produced using a biobased feedstock, which may lead to a more predictable cost structure when compared to petroleum-based plastic. Biobased feedstocks recycle carbon through photosynthesis, which removes carbon dioxide from the atmosphere. Conversely, the use of fossil feedstock results in release of carbon that has been sequestered underground for millions of years increasing atmospheric carbon dioxide that acts as a greenhouse gas ("GHG"). Producing Mirel biopolymers based on renewable resources therefore sequesters carbon dioxide in addition to reducing reliance on finite petroleum resources. If the polymer is ultimately biodegraded at end-of-life this carbon dioxide is recycled once again creating a GHG neutral cycle. The overall GHG balance for production of Mirel is dependent on the source of process energy (heat and power). Using renewable energy sources in addition to the feedstock can in certain circumstances result in net reduction of GHG emissions.

Performance Enhancement—Mirel biopolymers can improve the properties and performance of other polymer materials including PVC and PLA.

Property Range—Similar to petroleum-based plastic, Mirel biopolymers possesses a particularly broad range of functional properties, varying from hard and stiff to soft and flexible.

Processability—Mirel biopolymers can be processed in many types of existing conventional polymer conversion equipment that are currently being used for petroleum-based plastic with minimal adjustments.

Upper Service Temperature—Mirel biopolymers will withstand temperatures in excess of 100^{o} C, i.e., the boiling point of water, an important threshold. Some formulations of Mirel biopolymers can withstand temperatures up to 130^{o} C.

Resistance to Hydrolysis—While Mirel biopolymers will biodegrade in marine and fresh water environments, they are resistant to reacting with cold or hot water over the intended life span of the product.

Biobased and Biodegradability Certification

Mirel biopolymers have the advantage in the marketplace of being both biobased and biodegradable while having comparable functional properties to petroleum-based polymers. However, in today's marketplace there is sometimes confusion about the use of the terms "biobased" and "biodegradable." We have committed to following industry guidelines when making these claims. Mirel biopolymers have received the Vinçotte certifications of "OK Biodegradability Soil" for natural soil

biodegradability, "OK Biodegradability Water" for fresh water biodegradability, "OK Compost" for compostability in an industrial composting unit, and "OK Compost Home" for compostability in home composting systems. Vinçotte is the recognized European authority on materials inspection, certification, assessments and technical training. We believe that Mirel biopolymers are the only non-starch bioplastics to gain all four Vinçotte certifications. In addition to the Vinçotte certifications, Mirel biopolymers have been certified compostable by the Biodegradable Products Institute ("BPI"), an independent North American certifier of compostable material. BPI certification shows that Mirel biopolymers comply with the specifications established in the American Society for Testing and Materials standard ASTM D6400 for composting in a professionally managed composting facility. Mvera biopolymers have received the Vinçotte certification of "OK Compost" for compostability in an industrial composting unit.

Regulatory Requirements

Some applications for which Mirel may be suitable, such as food packaging, plastic-coated paper cups, and lids for disposable cups, involve food contact, which, in the United States, is regulated by the U.S. Food and Drug Administration ("FDA"). The FDA process for food contact requires the submittal of a dossier, which is made up of a number of extraction studies conducted under specific guidelines.

In 2010, Mirel F1005, F1006 and F3002 grades were cleared for use in non-alcoholic food contact applications. The conditions of use range from frozen food storage to boiling water up to 100°C, including microwave reheating. Mirel is suitable for a wide range of injection molded food service and packaging applications including caps and closures, and disposable items such as forks, spoons, knives, tubs, trays, and hot cup lids. The clearance also includes products such as housewares, cosmetics and medical packaging.

In early 2012, Mirel biopolymers in both film and thermoforming grades were cleared for use in food contact applications including paper coatings, bags, cups, trays, and squeeze bottles. An application to EFSA (European Food Safety Authority) for approval of Mirel biopolymers in film grade for use in food contact applications is pending in the European Union.

Trends and Opportunities for Mirel Biopolymers

Branded Products

The market for branded products and services with attributes of environmental responsibility and sustainability is an emerging business opportunity. We expect that by co-branding products that use Mirel and Mvera, Metabolix and its customers will be able to jointly promote environmental responsibility. We believe that producers are positioning products as environmentally responsible or superior to gain a competitive advantage as they believe consumer preferences are shifting. We believe the use of Mirel in branded products either directly or for packaging will facilitate and enhance customers' efforts to exploit this trend.

Regulated Markets

Regulatory action, such as bans, taxes, subsidies, mandates and initiatives, to encourage substitution of renewable and sustainable materials for petroleum-based incumbents is increasing. It is notable that there are bans on single-use plastic bags being mandated in areas around the world. In the geographic segments where regulatory drivers exist, we expect that Mirel biopolymers can meet requirements for biobased content or biodegradability that favor Mirel biopolymers over conventional petroleum-based plastics. In addition, producers are now anticipating regulatory change and are initiating programs to introduce sustainable materials to their products prior to or in an attempt to forestall implementation of such regulation. We believe that as awareness of our practical and affordable alternative grows, the pace of regulatory change may accelerate.

Market Segments for Metabolix Biopolymers

Although there are significant opportunities across many market segments, we are initially focusing on three main market segments: film and bag applications, performance additives and functional biodegradation. These markets have the strongest need for materials that are biobased and biodegradable either for branding value, because of regulatory requirements, or because biodegradability offers a useful property such as new end-of-life solutions like composting or anaerobic digestion. In addition, our biopolymers impart improved performance qualities when used as an additive and blended with other polymers including PVC. To approach these market segments, we expect to conduct certain, focused product and market development activities, including working with potential customers to determine their specific needs, and we have begun the process of qualifying our material for certain customer applications. As new inventory becomes available, we expect that these activities will accelerate.

The performance profile of our biopolymer products is closely matched to the needs of the following market segments:

Film and Bag Applications

The compostable bag market is growing as brand owners and retailers are motivated by regulatory and consumer demand. Compostable bags are the single largest application use for compostable materials. The driver for this market is the ongoing need to reduce and eliminate organics (food scraps and yard waste) from municipal waste streams and landfills. Applications such as single-use retail bags, industrial can liners, kitchen compost bags and organic lawn and leaf bags have a strong need for the industrial compostability offered by our Mvera biopolymer products. In 2012, we developed and launched Mvera B5008, a certified film grade resin intended for use in bag and film applications where industrial composting is the desired final route of disposal. We plan to develop additional Mvera products suited to the needs of the marketplace for film and bag applications.

Performance Additives

We are developing PHA biopolymers as performance additives. Metabolix biopolymer resins are either miscible or highly compatible as a dispersed modifier with a broad range of biobased and petroleum-based materials and can improve a range of performance attributes such as impact strength, heat resistance, barrier properties, processability and plasticization through blending with these materials. We are initially focused on developing polymeric modifiers for PVC, a polymer with a diverse use pattern ranging from construction materials to medical applications and an estimated global demand of approximately 35 million metric tons per year. In PVC, a compounded product is typically formulated with about 20-40% performance additives used to improve the processability and performance of PVC products. We are developing biobased, polymeric modifiers for semi-rigid and flexible PVC compounds. We have shown that our polymeric modifiers can provide a step change in impact modification, plasticization and process modification when added to PVC. We have also shown that our bioplastic polymeric modifiers have the potential to improve PVC impact resistance beyond that achievable with leading polymeric modifiers and at the same time serve as a non-migrating, non-phthalate plasticizer. In 2012, we sampled and launched I6001, a polymeric modifier for PVC and are working with customers to identify suitable applications for the technology that may allow us to broaden the addressable market opportunity for our materials, beyond our traditional focus on those markets requiring biodegradation. In 2013, we expect to continue to develop polymeric modifiers based on our PHA technology suitable for enhancing the performance of targeted polymers. Future applications include toughening of polylactic acid (PLA) where the ability to address the inherent brittleness of this material could significantly expand the potential applications that can be served. We believe that Metabolix has the potential to develop a family of biobased and fully biodegradable impact

modifiers with improved functionality compared to current fossil derived materials while also being biobased and biodegradable.

Functional Biodegradation

Applications such as agricultural film (mulch film, field film, bale wrap and greenhouse film), sod netting, erosion control netting and fencing have a strong need for the soil biodegradability offered by Mirel biopolymers. In the case of field and mulch agricultural film, Mirel biopolymers will biodegrade naturally after use and can be tilled into the field after a growing season. This can avoid the costs associated with the labor of removing the film from the fields and the associated disposal costs. In horticulture, the use of Mirel biopolymers can eliminate the need and cost of removing plant pots when planting and the subsequent costs associated with disposal. As compared to existing bioplastics in the market, Mirel biopolymers offer biodegradability, excellent toughness and strength, and long term shelf life prior to use. We do not believe that existing products provide the robust performance in use combined with the biodegradability that Mirel biopolymers offer.

PHAs are naturally metabolized and this property is useful in a number of applications including denitrification of closed water systems such as aquaria. Mirel polymers are offered into this market where they demonstrated particular value by controlled release of energy and carbon, resulting in a self-regulating system obviating the need for expensive controls and chemical dosage as required in competing solutions.

Studies have noted that the world's oceans show increasing levels of persistent plastic particles of a size ingestible by marine creatures at the bottom of the food chain. Larger plastic items are also accumulating in substantial quantities in certain parts of the ocean, and marine birds and mammals have been found dead from ingesting or getting tangled in plastic debris. Mirel biopolymers allow brand owners the opportunity to offer a product that will biodegrade if released into the environment or in applications where marine degradation is a key attribute (e.g., erosion control).

We have an extensive inventory of Mirel biopolymer grades available for uses requiring biodegradation.

Industry Landscape

The plastics market is large, with many established players. The market has grown around the chemical processing of oil and natural gas, and is concentrated in the conventional, non-biodegradable petroleum-based segment.

Established companies in this segment include Dow Chemical, DuPont, BASF, Ineos, LyondellBasell, SABIC and Mitsubishi Chemical, among many others. The price of conventional petroleum-based plastic is volatile, as it is dependent on petroleum as a key manufacturing input. In addition, the non-biodegradability of conventional petroleum-based plastics makes them persistent in and harmful to the environment and creates significant waste.

A few companies, such as DuPont, DSM, Arkema, and Braskem have taken steps toward plastics based on renewable resources, and are commercializing conventional plastics that use building blocks derived from renewable resources as components. These products are generally not biodegradable. Other producers of petroleum-based plastics, including BASF, and Samsung, now produce certain petrochemical grades that are biodegradable in industrial compost environments, but are otherwise persistent in the environment and are still subject to the volatility of oil and natural gas prices.

Our most comparable competitors are in the biodegradable, renewable resource based plastic segment, within which there are three distinct technologies: PHA, polylactic acid (PLA) and starch-based biodegradables. Just as a wide variety of different petroleum-based plastics now serve the needs of the market, we believe that these three product classes are more complementary than competitive.

We believe that of these three product classes, Mirel offers a broad range of properties and processing options, and will address a large proportion of opportunities as an environmentally attractive yet functionally equivalent alternative to conventional petroleum-based plastics. Unlike PLA and most starch-based biodegradables, Mirel can:

- biodegrade in natural soil and water environments, including the marine environment,
- biodegrade in industrial or home composts,
- remain functional in a wide range of temperature settings, and
- not break down in everyday use.

Companies active in the PHA plastics segment include Kaneka, Tianan, Tianjin, EcoMann and a minor producer in Brazil. The key players in PLA and starch-based biodegradable plastics include NatureWorks, Mitsui Chemical, Teijin, Novamont and Biome. In addition, there are companies that compound blends of various materials, including bioplastics.

Summarized below is an overview of the industry landscape for conventional, biobased and biodegradable polymers.

Biodegradability	Based on Petroleum	Based on Renewable Resources
Biodegradable	*Synthetic Biodegradable:* BASF (Ecoflex™) Dupont (Biomax™) ShowaDenko (Bionolle™) Mitsubishi Chemical (GS Pla) Samsung (PBAT) Zhejiang Hisun (PBAT)	*PHA:* Kaneka (PHBH) Tianan (PHBV) Tianjin (SoGreen™) EcoMann (EM) *PLA:* NatureWorks (Ingeo™) Mitsui Chemical (Lacea™) *Starch-based:* Novamont (Mater-Bi™) Biome
Non-biodegradable	Conventional petroleum-based plastics	Dupont (Sorona™ (~30% biobased) Dow Chemical (Soybean Polyurethanes) Arkema (Nylon 11) Braskem (polyethylene)

Biobased Industrial Chemicals Platform

Overview

The combined global market for conventional C4 and C3 industrial chemicals is estimated at more than $10 billion annually. These fundamental building block industrial chemicals have application to a broad range of industrial and consumer products. We view this market as attractive both commercially and technologically for the development and deployment of our PHA fermentation and FAST recovery technologies. We believe our technology can be used to produce these chemicals from renewable feedstocks cost effectively as "drop in" replacements in the industry supply chain for conventional chemicals produced with oil priced at or above $90 per barrel; we believe our GBL product will ultimately be very attractive at even lower oil prices.

Our objective is to develop and commercialize biobased industrial chemicals starting with C4 and then C3 through partnerships with industry leaders. Our business strategy is to form strategic alliances where our partners contribute fermentation and manufacturing capabilities, access to market channels in the value chain and related assets, and Metabolix contributes intellectual property, proprietary technology and process engineering capabilities to enable commercialization of a new source of supply for competitive, cost-effective biobased industrial chemicals to meet rising global market demand.

In our biobased industrial chemicals platform, our C4 program is most advanced in development toward commercialization. We have developed our proprietary fermentation and FAST recovery processes to produce biobased gamma-butyrolactone ("GBL") at industrial scale. Through an established synthetic route, our biobased GBL can be converted to biobased butanediol ("BDO"), the workhorse of the C4 industry value chain that enables access to broad segments of the market.

We have also demonstrated that our technology is directly applicable to the manufacture of biobased acrylic acid, the primary industrial chemical in the C3 industry value chain. We have focused initially on engineering production strains for fermentation and validating our FAST recovery process for production of biobased acrylic acid.

Market for C4 and C3 Industrial Chemicals

Global demand for conventional C4 industrial chemicals is estimated at approximately $3 billion annually, and has been growing at a rate of approximately four percent per year. C4 chemical products include BDO, and related chemicals including GBL, tetrahydrafuran ("THF") and pyrrolidones. These chemicals are used at industrial scale in a wide range of applications including engineering plastics, resins and solvents, auto parts, spandex, fabrics and fibers, personal care products and in semiconductor manufacturing. According to industry sources, manufacturing in this sector is concentrated as the top five companies represent approximately 60% of the market. Today, conventional C4 chemicals are produced almost entirely from fossil-based hydrocarbons such as natural gas, oil or coal. Furthermore, there are only testing and sampling quantities of biobased C4 chemicals on the market. Industry experts currently estimate that the first commercial scale supply of biobased C4 chemicals might begin to enter the marketplace in the 2014-2015 timeframe and will initially represent a small fraction of the C4 market.

Global demand for C3 chemicals is estimated at greater than $8 billion per year based on sales of 9 billion pounds annually. The global market is projected to grow at an annual rate greater than five percent driven by increasing demand in Asia, including China and India. Conventional C3 chemicals, including crude acrylic acid, glacial acrylic acid and acrylates, are used in products such as SAPs, water treatment chemicals, coatings (decorative, automotive, and paper) and adhesives.

Industry experts believe that escalating prices for both acrylic acid and its main feedstock propylene affect the economics of producing C3 chemicals and have created an interest in producing C3 from renewable routes. These routes may serve to reduce or contain costs and to uncouple production from the volatility of petroleum markets, in addition to providing the option to increase the bio-content of key consumer products, such as diapers and decorative paints.

Industry experts also believe that regulatory mandates and government policies seeking to increase utilization of biobased chemicals will become meaningful drivers for the market adoption of biobased C4 and C3 chemicals into the industrial chemical supply chain. In addition, we believe that brand owners are beginning to actively seek more renewable options from their supply chain producers. We also believe that growing awareness among both manufacturers and consumers for products containing renewable content may also become an increasingly important factor in driving conversion to biobased chemicals over the long run.

Metabolix PHA Technology and FAST Recovery Process

Conventional C4 and C3 chemicals are produced through established synthetic routes utilizing petrochemical-based feedstocks. Our process for creating biobased industrial chemicals involves engineering metabolic pathways into microbes that in a fermentation process produce specific biopolymers that serve as precursors for the C3 and C4 chemicals. Through our PHA technology, we are able to control the microbe biology to achieve high concentrations of specific, naturally-occurring biopolymers that accumulate inside cells as they metabolize sugars. This intracellular accumulation of the biopolymers inside the microbes is a unique and differentiating aspect of our technology. When the fermentation is completed, a novel recovery process known as "FAST" (fast-acting, selective thermolysis) that we have developed converts the biopolymers, poly-4-hydroxybutrate ("P4HB") for C4 chemicals, poly-3-hydroxyproprionate for C3 chemicals, directly to GBL and acrylic acid, respectively. In addition, known and commonly practiced catalytic processes can be used to cost effectively convert GBL to BDO.

The FAST recovery process is a proprietary, low-cost, energy-efficient approach to recover high-purity biobased chemicals directly from dried or whole fermentation broth. Our results show that 80 percent of the dry weight of the microbial cells from fermentation is PHA. We have shown that we can recover 90-95 percent pure chemical product in a single recovery step. In addition, the residual biomass from the fermentation step is converted to char, and can be recycled and combusted for process heat, making the FAST process energetically self-sustaining. Further, the water evaporated during the drying of the whole fermentation broth can be recycled after the product is isolated to eliminate wastewater and minimize make-up water requirements.

We believe our technology is differentiated and that it allows diversification of feedstock from existing fossil sources to renewable sources and this will offer cost advantages. Based on our understanding of industry economics, inputs and cost drivers, we believe that our FAST process for biobased industrial chemicals may produce economic advantages in deployment such as lower capital investment and lower manufacturing cost under future anticipated oil price scenarios. We have the ability to repurpose existing fermentation assets and leverage our common FAST recovery process platform to manufacture a range of chemicals and intermediates allowing a low capital entry strategy. In addition, with the elimination of fossil fuel inputs with our process, we believe our biobased C4 and C3 chemicals can be produced with a significantly lower carbon footprint as compared to conventional chemicals, provided renewable energy is used to power fermentation. Finally, our dried biomass step provides the option for the safe transportation and handling of the chemicals and optimization of the recovery plant location. We believe this could be a particularly attractive option for C3 chemicals, where acrylic acid can be a challenging product to ship and store.

We began our program in biobased industrial chemicals in 2007 when we received an Advanced Technology Program ("ATP") award from the U.S. Department of Commerce's National Institute of Standards and Technology. The program was designed to create a class of biobased routes for producing important industrial chemical intermediates, reducing our nation's dependence on fossil-based feedstocks and providing the nation with competitive advantages in polymers, chemicals and agriculture, all while reducing adverse environmental impacts.

The $2 million award funded our integrated bio-engineered chemicals ("IBEC") program to develop sustainable solutions for widely used C4 industrial chemicals. Over the three year grant period of our IBEC project, we achieved all of the program milestones. We demonstrated that we could engineer microbes to produce a range of PHA polymers though the fermentation of plant-derived sugars. We also demonstrated that these biopolymers could be converted into a variety of C4 industrial chemicals. At the conclusion of the project in 2009, we had developed a scalable first generation industrial production microbe.

Beginning in 2010, we focused our efforts on the technology and commercial development of the specialty C4 chemicals segment that includes GBL as well as BDO, THF and the pyrrolidones. Our initial focus has been to develop a commercial-scale process to directly produce biobased GBL. We may also use an additional existing synthetic route to convert biobased GBL to biobased BDO, allowing us to access this broad segment of the C4 market.

During 2010, we completed our first large-scale fermentation demonstrating scale-up of biobased GBL by a factor of 250 times with the strain performing essentially as expected based on the prior laboratory results. Our recovery and purification efforts continued and we made progress toward production of biobased GBL samples for shipment to potential customers for testing. We also expanded exploratory partnership discussions focusing on both upstream and downstream aspects of the value chain.

Building on those discussions, in July 2011, Metabolix and CJ CheilJedang announced the execution of a joint development agreement to continue to advance and refine our production technology and assess investment options for the commercialization of biobased C4 chemicals via fermentation. CJ BIO, a division of CJ CheilJedang, is a world leader in fermentation based research and development and manufacturing producing a range of nucleotides, and amino acids, including lysine. The two companies worked closely to develop a detailed market and economic analysis examining aspects of an investment to commercialize biobased C4 chemicals.

In 2011, we continued refining and scaling our fermentation and thermolysis processes and conducted an in-depth analysis of the market opportunity for "green" GBL. We successfully conducted a trial fermentation run at the 60,000 liter industrial scale. We recovered the biomass from the production runs and, using our FAST technology, extracted tonnage quantity of our biobased GBL for use in pilot testing by potential customers.

We tested the GBL product produced using our PHA fermentation and FAST technologies and confirmed that the material met the existing industry specifications for conventional GBL. The existing industrial chemical specification benchmark for GBL is 99.7% purity for general chemical grade. In addition, we sent our GBL samples to a private laboratory to test for the presence of Carbon 14 (a test for fossil carbon), and the results using this well established test showed that the carbon in our GBL samples meets the requirements for being designated "renewable."

We also worked with a prospective downstream partner and demonstrated at laboratory scale the ability to convert our biobased GBL to N-methyl-2-pyrrolidone ("NMP") and meet industry specifications. According to industry sources, over 70 percent of GBL consumption is for the manufacture of NMP, which is used as a solvent in lube oil extraction, electronics applications, paint strippers, magnetic wire coatings and engineering resins.

Based on meeting our internal milestones of producing biobased GBL at industrial scale and meeting industry specifications, we have continued to conduct a series of exploratory partnership discussions focusing on both upstream and downstream aspects of the C4 value chain.

In 2012, we completed the preliminary design for a commercial scale plant including all of the components of our fermentation and recovery process to generate biobased GBL. In conjunction with our technical progress, we expect to continue discussions with industry leaders with the goal of forming the industry alliances necessary to successfully bring our biobased C4 industrial chemicals, including GBL and BDO, into commercial production. In addition, we are currently exploring potential GBL applications in high value-added specialty segments where high purity and biobased molecules are in high demand and can provide customers with additional competitive advantages.

Progress in our Biobased C3 Research and Development Program

Today, the global market for C3 chemicals, primarily acrylic acid, is estimated at $8 billion annually. The primary synthetic route for making conventional acrylic acid is the use of propylene oxidation which converts propylene to crude acrylic acid and glacial acrylic acid. This synthetic route to make acrylic acid relies almost entirely on fossil-based hydrocarbons. Based on our internal market assessments, we believe that there will be a clear and growing demand from brand owners for biobased acrylic as it is used in consumer-facing products such as paints, diapers and detergents.

Based on our success demonstrating our technology to produce biobased C4 chemicals, we are targeting the significant market for C3 chemicals, and specifically the production of biobased acrylic acid for deployment of our technology. Our initial efforts were focused on establishing a clear technology and intellectual property strategy for production of C3 chemicals with only minor modifications to existing manufacturing infrastructure. The additional consideration we have anticipated early in our program to develop acrylic acid is the inherent difficulty working with the molecule as it is highly reactive and corrosive and has to be handled under proper conditions.

Our objective is to develop and commercialize a new route to the production of biobased acrylic acid and acrylic esters with the goal of being cost competitive with fossil-based C3 chemicals at an oil price of $90 per barrel. Our strategy is to develop the new process and, given downstream processing and market considerations, work with a strategic partner early in the development cycle to develop the technology for successful commercialization.

In 2011, we undertook a market analysis of the global market for acrylic acid to assess the market participants, renewable technology competition, economics, intellectual property status, and end markets. We reached the conclusion that producing biobased C3 chemicals could be very attractive for deployment of our technology.

Based on this analysis, we began research and development in 2011 to extend our PHA fermentation and FAST recovery technology into the production of acrylic acid. We successfully engineered microbes that accumulate poly-3-hydroxypropanoate ("P3HP") and we demonstrated small scale (20-30L) fermentation. We also developed refinements to our FAST recovery technology adapted to the unique properties of acrylic acid. In our process, P3HP is produced by fermentation, then the dried biomass is converted directly to acrylic acid at *commercially attractive yields*. A major advantage of our process is that it avoids any additional chemical conversion steps.

In 2012, Metabolix continued scale up of fermentation and optimization of microbial strains for testing. We also continued development and optimization of our FAST recovery technology to produce biobased acrylic acid or acrylate esters to match the chemical specifications of conventional chemical counterparts. In addition, we successfully scaled-up recovery of acrylic acid from dried biomass using the "FAST" process in our Cambridge laboratory and provided sample quantities of dried biomass for conversion to biobased acrylic acid for customer evaluation. In 2013, we expect to continue partnership discussions to bring our biobased acrylic acid into commercial production.

Industry Landscape

The current global market for C4 and C3 chemicals is based almost entirely on fossil-based hydrocarbon feedstocks. In general, the conventional C4 and C3 markets in Europe, North America and Japan are led by several established international companies. The C4 market is expected to grow at a three to four percent rate over the next five years. In addition, in 2008 there was some contraction in the C3 market due to the recession and a decrease in the market for construction materials, including paints and coatings. Industry sources estimate a return to historical growth rates for C3 acrylic acid of approximately five percent annually based on the outlook for improved economic conditions and an increase in adoption of SAPs in China.

The nature of the chemicals industry historically follows a well-established trend where innovation and technology evolve to leverage new feedstocks that provide cost advantage. As potential alternatives to the primary synthetic routes currently deployed by the industry, there are several alternative bio-based routes being developed to produce biobased C4 and C3 chemicals. Based on our analysis of the market, we believe that over time, new capacity built to produce C4 and C3 will increasingly be based on technology that leverages renewable and less volatile feedstocks.

Our closest competitors are developing biobased technologies to produce biobased C4 and C3 through a variety of routes at industrial scale. These include Genomatica, Myriant, BioAmber, OPX/Dow, Cargill/Novozymes, and Novomer.

Summarized below is an overview of the industry landscape for conventional and biobased C4 and C3 industrial chemicals.

Industrial Chemical Market	Top 5* Producers (Conventional Routes)	Biobased Alternative Routes
C4 (GBL, BDO, NMP, and THF)	BASF Dairen Chemical ISP (Ashland) LyondellBasell Mitsubishi *Represent >60% of the global C4 (BDO) market	Genomatica (Direct to BDO fermentation) Metabolix (PHA Fermentation) Myriant, Bioamber, Reverdia, (Succinic acid production followed by conversion to BDO)
C3 (Acrylic Acid)	Arkema BASF Dow (Rohm & Haas) LG Chemical Nippon Shokubai *Represent >50% of the global C3 acrylic acid market	Arkema (Glycerol catalytic conversion to Acrylic Acid) OPX/Dow, Cargill/Novozymes/BASF (3HP Fermentation) MATRIC (Chemical Conversion of Lactic Acid) Novomer (ethylene oxide conversion to B-propiolactone followed by conversion to acrylic acid—only biobased if ethylene oxide is derived from EtOH) Genomatica (fumaric acid metathesis with ethylene) Metabolix (PHA Fermentation)

Crops Platform

Overview

The petroleum industry is based on a global model where fossil resources are extracted from the earth. Once captured, the fossil resource feedstock is transported to refineries where 90 percent is used to produce fuel and the remaining 10 percent is used to produce industrial chemicals, including plastics. With the increasing worldwide demand for fuels from renewable sources and the emerging demand for biobased plastics, chemicals and chemical intermediates, we believe there is a long term opportunity to create an alternative to the petroleum model based on the co-production of renewable energy and chemicals from crops.

Our objective is to develop patented technology to enable commercialization of renewable fuel and chemicals co-produced in proprietary crops. Our business strategy is to leverage our intellectual property and PHA technology in microbes and make the research adaptations and breakthroughs

needed to create proprietary systems to produce poly-3-hydroxybutrate (PHB, a subclass of PHAs) in the leaves and stems of high yielding biomass crops or in the seeds of industrial oilseeds. One of our approaches leverages our FAST recovery technology to convert PHB in plant biomass to chemicals and densified biomass for conversion to biofuels with favorable economics. In oilseed crops, we are also investigating the use of PHB-containing meal as an enhanced feed supplement to deliver prebiotic effects and enhanced feed conversion ratios.

Over the course of this program which began more than ten years ago, we have engaged in collaborations with academic institutions and secured more than $16 million in government grants to advance this research. In our research to date, we have achieved proof of concept for our proprietary technology for producing PHB bioplastics in demonstration crops and crops of agronomic interest including tobacco, oilseeds, switchgrass and sugarcane. We have also filed for intellectual property covering our inventions and have been awarded more than 30 patents to date. Further, our researchers and academic collaborators have published our research results in peer reviewed journals.

In 2011, we were awarded a grant by the Department of Energy ("DOE") for development of Renewable Enhanced Feedstocks for Advanced Biofuels and Bioproducts ("REFABB") to demonstrate the production and recovery of chemicals from crops. This three year, $6 million grant is expected to enable us to increase yields of PHB in switchgrass plants and conduct pilot testing to convert the PHB-containing biomass to crotonic acid using our FAST recovery process. Crotonic acid can be converted to a variety of chemical intermediates that are typically produced from non-renewable resources. In addition to the value of the biomass for producing biofuel, this process could create a pathway from crotonic acid to chemical intermediates that are currently valued at over $80 billion annually. In 2012, we were awarded three new grants for leading-edge crop research targeting multi-gene expression and transformation of plants including important biofuel and food crops. Funding from these three grants is expected to total approximately $1.0 million and will run through 2014. We expect to continue work in the crop program in 2013 under our grants, focused on switchgrass and oilseeds.

PHB and FAST Recovery Technology for Crops

PHAs are a natural component of numerous organisms in multiple ecosystems. In microbes, PHAs are natural intracellular stores of carbon and energy that accumulate as discrete granules within a cell when faced with a nutrient limitation. These granules of biopolymer can be isolated and converted to materials. Based on prior work demonstrating the production and recovery of PHA from microbial fermentation, researchers at Metabolix are developing proprietary genetic engineering systems to produce PHB from non-food crops. Precise insertion of novel pathways in plants is challenging due to the need for and the complexity of introducing multiple foreign genes and the lengthy time required for the cross-breeding of plant generations having new gene systems. Our researchers have designed expression systems for PHB using three genes (thiolase, reductase and PHA synthase) which are required to increase production of PHB in plant tissue. A key consideration in the work is to shift metabolism in the plant to increase PHB production but to not impair the ability of the plant to thrive and reproduce. We have developed different genetic engineering systems for different plant crops including tobacco, oilseeds, switchgrass and sugarcane. In research published to date in our program, we have achieved the following levels of PHB as a percent of dry weight in our plants: Tobacco (18% in leaves; 9% in whole plants), Oilseed/Camelina (16% in seeds; manuscript in development), switchgrass (7.7% in leaves) and sugarcane (4.8% in leaves).

Our current research in biomass crops is primarily focused on increasing PHB yield in switchgrass to a target of approximately 10 percent dry weight of the plant. Switchgrass is a commercially and ecologically attractive, non-food energy crop that is indigenous to North America. Switchgrass is an attractive biomass to energy crop that is generally considered to be a leading candidate for cellulose-derived production of ethanol and other biofuels. It is a high density perennial crop that can grow on

marginal land and does not require substantial inputs in terms of water or fertilization. It also has the capability of sequestering significant amounts of carbon dioxide from the atmosphere in its root systems.

In tandem with this work, our researchers have been developing methods based on our FAST recovery technology which uses heat to convert PHB in the plant biomass to crotonic acid that can be recovered and then serve as a platform chemical to produce other chemical intermediates such as propylene, butanol and maleic anhydride. We envision that the residual densified biomass produced using the FAST process will be a higher energy, transportable feedstock (similar to coal) that can be readily integrated with existing power generation or for gasification to produce infrastructure compatible bioenergy.

Our current research in oilseed crops is focused on increasing PHB yields in camelina seeds and increasing carbon capture and deposition of storage compounds. These research efforts are targeted towards producing bioplastics and/or enhanced animal feeds with prebiotic effects.

Plant Science Research Milestones

Tobacco: We evaluated the utility of a plastid transformation in engineering a robust system for expression of a multigene, biosynthetic pathway for the production of the bioplastic PHB in tobacco. We showed that tobacco has the capability to produce high levels of PHB, up to an average of 18 percent dry weight in leaves and nine percent in the biomass of the entire plant. These plants were the subject of a field trial in 2009. The significance of this work was as a demonstration system in tobacco for development of our technology. Results were published in 2011 in *Plant Physiology*.

Switchgrass: In 2001, Metabolix was awarded an Agriculture Industries of the Future (IOF) grant from the Department of Energy, a 5 year, $7.5 million grant involving seven universities and two national laboratories. This was our first grant supporting development of technology to produce PHAs in biomass crops to use as a feedstock for a biomass biorefinery. During this grant, we completed work demonstrating the first successful expression of a functional multi-gene pathway in switchgrass. In 2003, the IOF grant was replaced with a grant from the USDA and research continued. The results of our work in switchgrass were published in 2008 in the *Plant Biotechnology Journal* where up to 3.7% dry weight PHB was reported in leaves and up to 1.2% in a whole switchgrass tillers, a representative portion of the plant. We have subsequently increased levels to up to 7.7% in leaf tissue and up to 2.3% in a whole tiller. In 2011, Metabolix was awarded the Department of Energy REFABB grant to further increase PHB production in switchgrass to a target of approximately 10% dry weight of the plant. This work includes developing new methods based on our FAST recovery technology to convert PHB in the plant biomass to crotonic acid using heat. Biobased crotonic acid can serve as a platform chemical to produce other drop-in chemicals, such as propylene, butanol and maleic anhydride which are currently valued at over $80 billion annually.

Oil Seed/Camelina: Camelina is an industrial crop that grows well in the northern U.S. and Canada. We continue to evaluate co-production of PHB bioplastics with seed oil and meal in Camelina. In 2008, we established a two year research collaboration with noted oilseed experts at the Donald Danforth Plant Science Center ("Danforth Center"), a leading not-for-profit research institute in St. Louis, Missouri. This collaboration was supported financially by a $1.14 million grant from the Missouri Life Sciences Trust Fund to the Danforth Center. Metabolix assembled a team of scientists in St. Louis to work closely with the Danforth Center's principal investigators with the purpose of achieving technical goals for stable production of biobased plastics directly in oilseed crops. High levels of PHB have been produced in oilseeds and two USDA-APHIS regulated field trials of PHB-producing Camelina have been conducted. In 2010, Metabolix

established Metabolix Oilseeds, a wholly owned Canadian subsidiary of Metabolix, in Saskatoon, Saskatchewan, to produce robust oilseed germplasms with engineered value-added traits for commercial crop production in western North America. Oilseeds that can be used for the production of bioplastics, renewable chemicals, and enhanced feed ingredients are currently under development.

Sugarcane: Sugarcane is a high yielding biomass crop that grows well in tropical climate zones including South America, Australia and parts of Asia. In 2007, we entered into a research collaboration with Australia's Cooperative Research Centre for Sugar Industry Innovation through Biotechnology ("CRC SIIB") to develop sugarcane lines for the production of bioplastics. Together with the CRC SIIB we achieved a bioplastic content level of 3.5 percent in sugarcane leaves. During 2010, we formed a collaboration with the Australian Research Council and The University of Queensland to further research with sugarcane. Under this collaboration we evaluated the use of new promoters to drive gene expression and achieved PHB levels as high as 4.8 percent of leaf dry weight. This research was published in March 2012 in the *Plant Biotechnology Journal*.

Recent Progress

In 2011, Metabolix was awarded the $6 million REFABB grant by the DOE to engineer switchgrass producing 10 percent by weight PHB in the whole plant and to develop methods based on our FAST recovery technology to thermally convert the PHB-containing biomass to crotonic acid and a higher density residual biomass fraction for production of biofuel. Crotonic acid is a platform chemical that can be readily converted through simple, known chemical conversion steps to a range of commodity chemical intermediates including propylene, butanol and maleic anhydride, which are currently valued at over $80 billion annually.

To date, we have reported PHB production of up to 7.7 percent in switchgrass leaf tissue using proprietary genetic engineering and breeding technology. We have also achieved promising results in the model plant tobacco where PHB production of up to 18% dry weight in leaf tissue and nine percent dry weight in whole plants have been achieved. The approaches demonstrated in previous work will be applied to the ongoing research with the goal of increasing the levels of PHB to 10 percent in switchgrass, a level we believe could be commercially viable, if attained. In 2013, we expect to continue to advance research focused on increasing PHB production in switchgrass and developing a thermal conversion process for crotonic acid.

In 2012, we were awarded three grants for leading-edge crop research targeting multi-gene expression and transformation of plants, and builds upon our years of experience in transforming plants for bio-product production. Funding from these three grants is expected to total nearly $1 million and will run through 2014. In January, we initiated work on an ARPA-E funded project to work with the University of Massachusetts Amherst ("UMASS Amherst") to help increase the natural ability of camelina to produce oils and add the production of energy-dense terpene molecules that can be easily converted into liquid fuels. In April, Metabolix Oilseeds, a wholly owned subsidiary of Metabolix, was awarded a grant for the development of capacity building for commercial-scale polyhydroxybutyrate (PHB)-producing camelina. In December, we announced receiving a subaward under the Advanced Research Projects Agency—Energy ("ARPA-E") to work with the UCLA Henry Samueli School of Engineering and Applied Science to redesign carbon fixation pathways to increase the efficiency of capturing energy from sunlight. This research is expected to increase carbon fixation and subsequent storage product deposition in camelina and other plants. We will work with UCLA Engineering to investigate an alternative biochemical pathway that theoretically could allow a plant to capture twice as much CO_2 using the same amount of light, with the end goal of improving the productivity of both food and fuel crops.

The Potential Benefits to Producing Renewable Energy and Chemicals from Plant Crops

We believe we can engineer a commercial system that co-produces biobased bioplastics or chemicals along with biomass for conversion to energy (such as steam, electricity or biofuels such as ethanol or biodiesel). This concept, called a "biomass biorefinery," is based on the co-production of energy and higher value biobased plastic or biobased chemicals. It is analogous to today's energy/petrochemical industry where synthetic plastics are derivative value-adding products along with energy produced from petroleum and natural gas. We believe the co-production of biobased plastics or chemicals with energy in an integrated system will offer superior economic value and efficiency as compared to a single product system.

We envision the following potential benefits to our approach:

Integrated Value Chain Opportunity for Biobased Chemicals and Biofuels: In a fully realized Metabolix crop-based bio-industrial production system, the value chain begins with the growth of crops containing PHB followed by polymer recovery to produce bioplastics or biobased chemicals and processing of residual biomass for generating energy or biofuel.

Crop Diversification: The production of PHB in crops provides an opportunity for farmers to diversify their crop plantings to a crop with higher income potential and potential for reduced risk exposure.

Source of High Value Biobased Chemicals: PHB can be used directly as bioplastic and to derive a number of valuable, biobased industrial chemicals. Adoption of PHA bioplastic materials derived from our PHB in consumable goods would avoid long term accumulation of plastic waste in landfills, roadsides, oceans and inland waters. PHA bioplastics are fully biodegradable under ambient, marine and anaerobic conditions. Production of biobased industrial chemicals from crops would serve to respond to the emerging demand for renewable content and would decouple chemical production from the market volatility for petroleum feedstocks.

Greenhouse Gas Reduction with Bioenergy Production: The cultivation of crops producing PHB can play a vital role in the reduction of global or local greenhouse gas emissions. Petrochemical plastics and chemicals require petroleum as both a feedstock and for process energy during production. In contrast, using crops to produce PHB uses CO_2 from the atmosphere to form the biopolymer in addition to generating energy results in a reduced carbon footprint.

Intellectual Property

Our continued success depends in large part on our proprietary technology. We rely on a combination of patent, copyright, trademark and trade secret laws, as well as confidentiality agreements, to establish and protect our proprietary rights.

We own approximately 365 issued patents and approximately 150 patent applications worldwide, and we have licensed from third parties approximately 40 issued patents and patent applications worldwide. In 2012, we filed 14 new patent applications based on inventions including methods of processing Mirel biopolymers and compositions for end user applications, use of PHA-containing biomass to produce biobased industrial chemicals, and PHA expression systems in microbes and plants. We were also granted or allowed 43 patent applications, 5 in the United States of America and 38 internationally, in 2012. The inventions covered under these patents include novel multi-gene encoding systems in microbes, novel feedstocks for producing PHAs, PHA adhesives, and PHA biopolymers for medical applications. We continue to seek and evaluate new technologies for possible licensing opportunities which may enhance our company's business competitiveness.

Our extensive patent portfolio covers, among other things, the fundamental biotechnology needed to produce Mirel biopolymers and a range of biobased chemicals as well as biopolymer compositions, processes and derived products. The licensed patents and patent applications include patents covering

our core technology that are owned by Massachusetts Institute of Technology ("MIT") and exclusively licensed to us. Under the MIT licensing agreement, we pay annual license fees. In addition, under this licensing agreement, we are obligated to pay royalties on sublicensing revenue and sales of products, if any, covered by the licensed patents.

Our intellectual property portfolio includes patents directed to compositions of polymers, genes, vectors, expression systems in plants and microbes, devices, coatings, films, as well as methods of manufacture and use. The terms of such patents are set to expire at various times between 2013 and 2030.

In 2007, we entered into an exclusive license agreement with the University of Massachusetts at Lowell ("UMass Lowell") relating to United States Patent No. 5,883,199. The licensed technology was developed by inventors at UMass Lowell. We have granted nonexclusive sublicenses under this patent to BASF Corporation to produce and market blends of PLA and polybutylene adipate terephthalate ("PBAT") and to NatureWorks, LLC to make, use and sell blends of PLA with certain other polymers, including polybutylene succinate ("PBS"). In 2007 we entered into an agreement granting Abbott Laboratories an exclusive worldwide patent license for the use of our multi-gene expression technology in pharmaceutical product applications. We expect that from time to time we may grant further licenses and sublicenses under our patents and the patents we have licensed from third parties as appropriate and consistent with the commercialization of our own products.

Our registered U.S. trademarks include *Metabolix*, the Metabolix four-leaf design, *Telles*, *Mirel*, the Mirel heart-leaf design, *Mvera* and *Biopol*. These marks and certain other trademarks have also been registered in selected foreign countries.

Employees

As of December 31, 2012, we had 93 full-time employees. Of those employees, 60 were in research and development, 7 were in sales and marketing and 26 in general and administration. Among our research staff, 23 hold Ph.D.'s and 32 hold masters' or bachelors' degrees in their respective disciplines. Our technical staff has expertise in the following areas: microbial genetics, bioinformatics, metabolic engineering, systems biology, plant genetic engineering, fermentation process engineering, chemical engineering and polymer science and engineering. Most of our employees are located in Massachusetts. None of our employees are subject to a collective bargaining agreement. We consider our relationships with our employees to be good.

Research and Development Expenses

During the years ended December 31, 2012, 2011 and 2010, we spent approximately $23.2 million, $24.4 million and $23.7 million, respectively, on company-sponsored research and development activities.

Corporate and Investor Information

Our company was incorporated in Massachusetts in June 1992 under the name Metabolix, Inc. In September 1998, we reincorporated in Delaware. Financial and other information about our company is available on our website (http://www.metabolix.com). The information on our website is not incorporated by reference into this annual report on Form 10-K and should not be considered to be part of this annual report on Form 10-K. We make available on our website, free of charge, copies of our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") as soon as reasonably practicable after filing such material electronically or otherwise furnishing it to the Securities and Exchange Commission (the "SEC"). In addition, the public may read and copy any materials that we file with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. Also, our filings with the SEC may be accessed through the SEC's website at www.sec.gov.

ITEM 1A. RISK FACTORS

Our operations and financial results are subject to various risks and uncertainties that could have a material adverse effect on our business, financial condition, results of operations and the trading price of our common stock.

Risks Relating to our Financial Position

We have a history of net losses and our future profitability is uncertain.

We have typically had net operating losses since being founded in 1992. At December 31, 2012, our accumulated deficit was approximately $242.0 million. Since 1992, we have been engaged primarily in research and development and early-stage commercial activities. Because we have a limited history of commercial operations and we operate in a rapidly evolving industry, we cannot be certain that we will generate sufficient revenue to operate our business and become profitable.

Our ability to generate revenues in the near-term is highly dependent on the successful commercialization of our first and only product family in the market, PHA biopolymers, which is subject to many risks and uncertainties as described below. Our other technologies are still in the early stages of development. We may never be able to manufacture and sell other products developed with our technology on a commercial scale. The success of our plant crop and industrial chemicals programs will depend on our ability to obtain suitable partnerships and collaborations for commercialization of those technologies, and our ability to obtain funding from government grants and other sources. Even if we are able to obtain suitable partnerships to commercialize our technologies relating to the production of biobased plastics and chemicals in crops and biosourced industrial chemicals, and we secure manufacturing arrangements for our biopolymers, we expect that it will take time for our manufacturing to ramp up to an economical scale while the market for our products expands. As a result, we expect to have significant losses and negative cash flow for at least the next several years, as we incur additional costs and expenses for the continued development and expansion of our business, including the costs of establishing manufacturing capacity and ongoing expenses of research and product development. The amount we spend will impact our ability to become profitable and this will depend, in part, on the number of new products that we attempt to develop. We may not achieve any or all of these goals and, thus, we cannot provide assurances that we will ever be profitable or achieve significant revenues.

Even if we can successfully manufacture and sell our products, whether we are able to generate a profit on any of these products is highly uncertain and depends on a number of factors including the cost of production, the price we are able to charge for these products, and the emergence of competing products.

We will need to secure additional funding and may be unable to raise additional capital on favorable terms, if at all.

The Company held unrestricted cash, cash equivalents and investments of $46,281 at December 31, 2012. We believe that these resources and the cash to be generated from existing grants and expected product sales will be sufficient to meet our projected operating requirements for at least the next twelve months. We continue to face significant challenges and uncertainties and, as a result, our available capital resources may be consumed more rapidly than currently expected due to (a) lower than expected sales of our biopolymer products as a result of slow market adoption; (b) increases in costs related to the start-up and operation of commercial manufacturing operations with third parties; (c) changes we may make to the business that affect ongoing operating expenses; (d) changes we may make to our business strategy; (e) changes in our research and development spending plans; and (f) other items affecting our forecasted level of expenditures and use of cash resources. Accordingly, we may need to raise additional funds to support our operating and capital needs, and longer term, we will

require significant additional financing to continue to fund our operations. We may attempt to obtain additional funding through public or private financing, collaborative arrangements with strategic partners, or through additional credit lines or other debt financing sources to increase the funds available to fund operations. However, we may not be able to secure such financing in a timely manner and on favorable terms, if at all. Furthermore, if the Company issues equity or debt securities to raise additional funds, our existing stockholders may experience dilution, and the new equity or debt securities may have rights, preferences and privileges senior to those of our existing stockholders. If we raise additional funds through collaboration, licensing or other similar arrangements, it may be necessary to relinquish valuable rights to our potential products or proprietary technologies, or grant licenses on terms that are not favorable to the Company. Without additional funds, we may be forced to delay, scale back or eliminate some of our sales and marketing efforts, research and development activities, or other operations and potentially delay product development in an effort to provide sufficient funds to continue our operations. If any of these events occurs, our ability to achieve our development and commercialization goals would be adversely affected.

Risks Relating to our Biopolymers Business

We may not be able to obtain sufficient biopolymer manufacturing capacity on a timely or economical basis.

After termination of the commercial alliance, ADM retained its ownership of the Commercial Manufacturing Facility in which our PHA biopolymers were produced. While we retained certain pre-commercial manufacturing equipment for pilot plant production, we do not currently have a facility for commercial scale manufacturing of biopolymers.

In 2012, we entered into an arrangement with Antibioticos S.A. for demonstration production of biopolymers at the Antibioticos facility in Leon, Spain, with the intention, upon successful completion of the demonstration phase, to enter into a commercial manufacturing agreement under which Antibioticos would provide toll manufacturing of our PHA biopolymers. However, Antibioticos is experiencing financial difficulties, and we cannot be certain that Antibioticos will be able to complete the demonstration, or to fulfill its obligations if we enter into a commercial manufacturing agreement. We are aware that Antibióticos is in a process of financial restructuring, and our ability to obtain biopolymer product from Antibióticos will depend on the outcome of that restructuring. Further, we cannot be certain that other suppliers, including Tianjin GreeBio, will be able to supply product meeting our requirements.

We continue to evaluate various manufacturing options. However, our biopolymer manufacturing technology is highly complex. Construction of a new manufacturing facility or modification of an existing facility to make it suitable for our manufacturing process could be time-consuming and expensive. We cannot assure you that we will be able to successfully manufacture biopolymers in a timely or economical manner, or at all. We cannot assure you that we will have the necessary funds to finance the construction or modification of a commercial manufacturing facility, or that we will be able to develop a manufacturing infrastructure in a timely or economical manner, or at all. We may depend on obtaining commercial partners to finance and/or construct commercial manufacturing facilities for biopolymer production.

Since our manufacturing process has not yet been run at commercial scale at any location other than ADM's Commercial Manufacturing Facility in Clinton, Iowa, our future manufacturing costs are uncertain and may ultimately be higher than we expect. If the commercial manufacturing capacity that we build or otherwise obtain is not appropriate to the level of market demand, manufacturing costs may not be economical. If we fail to develop adequate manufacturing capacity and expertise or fail to manufacture biopolymers economically at large scale or in commercial volumes, the commercialization of our biopolymers and our business, financial condition and results of operations will be materially adversely affected. Further, if we fail to obtain or maintain third party toll compounding services on

acceptable terms, or to establish our own compounding facility to provide such services in a timely and economical manner, the commercialization of biopolymers and our business, financial condition and results of operations will also be materially adversely affected. There is the further risk that the quality of the commercial product manufactured for us may not be acceptable on a consistent basis.

We may not be able to obtain raw materials in sufficient quantities or in a timely manner.

We expect that the production of our biopolymer products will require large volumes of feedstock. ADM was the sole source of the dextrose (corn sugar) that was the primary feedstock for the production of Mirel under the ADM commercial alliance. With the termination of that commercial alliance, we are now free to explore the use of other feedstocks. However, we cannot predict the future availability of any particular feedstock or be sure that we will be able to purchase it in sufficient quantities or in a timely manner. Many of our current and anticipated products are blends of PHA biopolymers with other materials. Processing agents, additives and other materials blended with Mirel formulations may only be available from limited sources. If raw materials cannot be obtained in sufficient quantities or at acceptable prices, our ability to produce our products may be impaired, the cost of our formulations may increase, and our business will be adversely affected.

Our biopolymer products may not achieve market success.

We currently have limited customer commitments for commercial quantities of our biopolymer products. Some prospective customers are currently evaluating and performing tests on our products prior to making large-scale purchase decisions. The successful commercialization of our PHA biopolymers is also dependent on our customers' ability to commercialize the end-products that they make from our PHA biopolymers, which may never gain market acceptance.

Market acceptance of our products will depend on numerous factors, many of which are outside of our control, including among others:

- public acceptance of such products;
- our ability to produce products of consistent quality that offer functionality comparable or superior to existing or new polymer products;
- our ability to produce products fit for their intended purpose;
- our ability to obtain necessary regulatory approvals for our products;
- the speed at which potential customers qualify our PHA biopolymers for use in their products;
- the pricing of our products compared to competitive products, including petroleum-based plastics;
- the strategic reaction of companies that market competitive products;
- our reliance on third parties who support or control distribution channels; and
- general market conditions.

We currently have limited marketing, sales and distribution experience and capabilities. Our future revenues will be materially dependent upon our ability to identify and hire new employees and augment our own resources by entering into distribution arrangements and collaborations with third parties. If we are unable to develop or obtain access to sales and marketing and distribution expertise, sales of our biopolymer products, if any, may be adversely affected.

Other Business Risks

We may not be successful in the development of our crop-based platform or our industrial chemicals program.

We are at an early stage of developing the technology and processes to produce biobased plastics and chemicals in plant crops, including switchgrass, sugarcane and oilseed. Our chemical development efforts are also at a very early stage. The technological challenges associated with these programs are extraordinary and we may not be able to overcome these challenges. Completion of such development work will require a significant investment of both time and money, if it can be completed at all. In order to obtain the financial resources to complete this work, we will rely on government funding and strategic collaborations, which may not be available on acceptable terms, if at all.

We cannot predict the costs of producing biobased plastics or chemicals in plant crops or producing chemicals through biological routes, given the stage of development of these programs. The anticipated methods for manufacturing biobased plastics and chemicals in crops and for producing bio-engineered chemicals and energy are highly complex processes in which a variety of difficulties may arise and there are extensive regulatory requirements to be met. The success of our industrial chemicals program will also depend on the cost of the sugars that we will use as feedstocks, relative to the price of petroleum. Given these uncertainties, we may not be able to successfully produce biobased plastics or chemicals in plant crops or biosourced chemicals in an economical manner.

We may rely heavily on future collaborative partners.

We may enter into strategic partnerships to develop and commercialize our current and future research and development programs with other companies to accomplish one or more of the following:

- obtain capital, equipment and facilities,
- obtain funding for research and development programs, product development programs and commercialization activities,
- obtain expertise in relevant markets,
- obtain access to raw materials, and/or
- obtain sales and marketing services or support.

We may not be successful in establishing or maintaining suitable partnerships, and we may not be able to negotiate collaboration agreements having terms satisfactory to us or at all. Failure to make or maintain these arrangements or a delay or failure in a collaborative partner's performance under any such arrangements could have a material adverse effect on our business and financial condition.

We face and will face substantial competition.

We face and will face substantial competition from a variety of companies in the biodegradable, renewable resource-based plastic segment, within which there are three distinct technologies: PHA, PLA and starch-based biodegradables. We believe that these product classes are more complementary than competitive. However, such products are, nonetheless, suitable for use in a range of products at a price which may be lower than our premium priced product offerings. Companies that could be considered our competitors include, but are not limited to, Kaneka, Tianan, Tianjin and EcoMann in the PHA plastic segment, NatureWorks, Mitsui Chemical, Teijin, Novamont, and Biome in PLA and starch-based biodegradables, as well as all of the producers of petroleum-based plastics. Many of these companies have longer operating histories, greater name recognition, larger customer bases and significantly greater financial, sales and marketing, manufacturing, distribution, technical and other resources than Metabolix. Our competitors may be able to adapt more quickly to new or emerging technologies and changes in customer requirements. In addition, current and potential competitors have

established or may establish financial or strategic relationships among themselves or with existing or potential customers or other third parties. Accordingly, new competitors or alliances among competitors could emerge and rapidly acquire significant market share. We cannot assure you that we will be able to compete successfully against current or new competitors.

Changes in government regulations may have an adverse effect on demand for our products.

One of the key markets for our biopolymer products is as compostable and biodegradable substitutes for non-biodegradable petroleum-based plastics. This market is driven in part by laws, regulations and policies designed to encourage or mandate the increased use of biodegradable alternatives to petroleum-based plastics. In addition, we are in the early stage of developing plant crops for co-producing plastics or chemicals together with biofuels. The market for biofuels is heavily influenced by governmental laws, regulations and policies mandating or providing incentives for fuel alternatives. There are numerous companies and trade associations that aggressively oppose these policies. The phasing out or elimination of these or similar laws and regulations may adversely affect the demand for the crop-based products we are developing and deter investment in the research and development in such products or biofuels, which would adversely affect our business.

Our products are made using genetically-engineered systems and may be, or may be perceived as being, harmful to human health or the environment.

Mirel is a new material that has been produced by genetically-engineered microbes using sugar derived from genetically engineered corn as a feedstock. Our future products may be produced in genetically-engineered crops or through fermentation using genetically-engineered microbes. We may incur liability and/or legal expenses if there are claims that our genetically-engineered crops damage the environment or contaminate other farm crops. Some countries have adopted regulations prohibiting or limiting the production of genetically-engineered crops and the sale of products made using genetically engineered organisms. Such regulations could harm our business and impair our ability to produce biobased polymers in that manner.

The subject of genetic engineering of crops and other species has received negative publicity and has aroused public debate. Government authorities could, for social or other purposes, prohibit or regulate the development and use of genetically-engineered organisms or products made from such organisms. Social concerns could adversely affect acceptance of our products.

Our success will be influenced by the price of petroleum relative to the price of biobased feedstocks.

Our success will be influenced by the cost of our products relative to petroleum-based plastics and chemicals. The cost of petroleum-based plastic is in part based on the price of petroleum. To date, Mirel has been primarily manufactured using corn sugar, an agricultural feedstock. ADM supplied all required agricultural feedstock as part of our strategic alliance. If the price of plant sugar feedstocks were to increase and/or if the price of petroleum decreases, our biobased products may be less competitive relative to petroleum-based plastics and chemicals may not be competitive. A material decrease in the cost of conventional petroleum-based plastics and chemicals may require a reduction in the prices of our products for them to remain attractive in the marketplace or reduce the size of our addressable market.

We face risks associated with our international business activities.

We expect to establish international manufacturing and to expand our international commercial operations and activities. In particular, our biopolymer resins may be obtained from supply sources outside the U.S. and we expect that a substantial portion of our biopolymer sales will be to customers in Europe. Such international business operations are subject to a variety of risks associated with conducting business internationally, including:

- economic or political instability in foreign countries, which could impact our customers and suppliers, reducing customer product orders, increasing bad debts, and potentially causing delays or stoppages in production;
- fluctuations in foreign exchange rates;
- pricing of raw materials in foreign countries relative to the costs of such materials in the U.S.;
- compliance with U.S. and foreign import and export control regulations and policies;
- compliance with foreign permitting, registration and regulatory requirements with respect to manufacturing and importation of our products and raw materials;
- the imposition of taxes, tariffs, quotas, trade barriers and restrictive trade policies;
- the possibility of inconsistent laws or regulations; and
- uncertainties relating to foreign laws and the enforcement of remedies in foreign jurisdictions.

In addition, we currently have only a small staff located in our European office. Expansion of our European activities will require additional resources located in Europe, as well as the time and attention of our U.S. based management and technical personnel. We do not know the impact that these regulatory, geopolitical, and other factors may have on our international business in the future.

If we lose key personnel or are unable to attract and retain necessary talent, we may be unable to develop or commercialize our products under development.

We are highly dependent on our key technical and scientific personnel, who possess unique information related to our research and technology. If we were to lose the services of these individuals, we may be unable to readily find suitable replacements with comparable knowledge and experience necessary to further our research, development and commercial programs. Our success depends largely upon the continued service of our management and scientific staff and our ability to attract, retain and motivate highly skilled technical, scientific, management, and marketing and sales personnel. Because of the unique talents and experience of many of our scientific, engineering and technical staff, competition for our personnel is intense. The loss of key personnel or our inability to hire and retain personnel who have the required expertise and skills could have a material adverse effect on our research and development efforts and our business.

We are subject to significant foreign and domestic government regulations, and compliance or failure to comply with these regulations could harm our business.

The manufacture, use, sale and marketing of Mirel is subject to government regulations in the U.S. and other countries, including requirements for government approval of food contact applications. Our plant-crop and biobased chemical products will also be subject to government regulation in our target markets. In the U.S., the EPA administers the Toxic Substances Control Act, or TSCA, which regulates the commercial registration, distribution, and use of chemicals. A similar program exists in the European Union, called REACH (Registration, Evaluation, Authorization, and Restriction of Chemical Substances). The use and handling of GBL, the initial target of our biobased industrial chemicals program, is regulated by the U.S. DEA. The failure to comply with governmental regulations or to

obtain government approval for our products could have a material adverse effect on our results of operations and financial condition. Governmental regulation or negative publicity could delay, reduce or eliminate market demand for our products which could have a material adverse effect on our results of operations and financial condition.

Our current and planned activities also involve the use of a broad range of materials that are, or may be, considered hazardous under applicable laws and regulations. Accordingly, we are subject to a number of foreign, federal, state, and local laws and regulations relating to protection of the environment, the storage, use, disposal of, and exposure to, hazardous materials and wastes, and health and safety. Compliance with these laws and regulations could be costly and could delay or even preclude commercialization of our products for certain applications.

If we were to violate or become liable under environmental, health and safety laws, we could incur costs, fines and civil and criminal penalties, personal injury and third party property damage claims, or could be required to incur substantial investigation or remediation costs. Moreover, a failure to comply with environmental laws could result in the revocation of environmental permits, which could prevent us, or our strategic partners, from conducting business. Environmental laws could become more stringent over time, imposing greater compliance costs and increasing risks and penalties associated with violations, which could harm our business. Accordingly, violations of present and future environmental laws could restrict our ability to expand facilities, pursue certain technologies, and could require us to acquire costly equipment, or to incur potentially significant costs to comply with environmental regulations.

We may not have adequate insurance and may have substantial exposure to payment of product liability claims.

The testing, manufacture, marketing, and sale of our products may involve product liability risks. Although we currently have product liability insurance covering claims up to $4 million per occurrence and in the aggregate, we may not be able to maintain this product liability insurance at an acceptable cost, if at all. In addition, this insurance may not provide adequate coverage against potential losses. If claims or losses exceed our liability insurance coverage, it could have a material adverse effect on our business and our financial condition.

Potential future acquisitions could be difficult to integrate, divert the attention of key personnel, disrupt our business, dilute stockholder value and impair our financial results.

As part of our business strategy, we may consider acquisitions of companies, technologies and assets that we believe are a strategic fit with our business. Acquisitions involve numerous risks, any of which could harm our business, including:

- difficulties in integrating the operations, technologies, existing contracts, accounting and personnel of the target company and realizing the anticipated benefits of the combined businesses;
- diversion of financial and management resources from existing operations;
- the price we pay or other resources that we devote may exceed the value we realize, or the value we could have realized if we had allocated the purchase price or other resources to another opportunity;
- potential loss of key employees, collaborators and strategic alliances from either our current business or the acquired business;
- assumption of unanticipated problems or latent liabilities; and
- inability to generate sufficient revenue to offset acquisition costs.

Acquisitions also frequently result in the recording of goodwill and other intangible assets which are subject to potential impairments in the future that could harm our financial results. In addition, if we finance acquisitions by issuing convertible debt or equity securities, our existing stockholders' ownership interest may be diluted, which could lower the market price of our common stock. As a result, if we fail to properly evaluate acquisitions or investments, we may not achieve the anticipated benefits of any such acquisitions, and we may incur costs in excess of what we anticipate. The failure to successfully evaluate and execute acquisitions or investments or otherwise adequately address these risks could materially harm our business and financial results.

Risks Relating to Intellectual Property

Intellectual property protection for our products is important and uncertain.

Our commercial success will depend in part on our obtaining and maintaining patent, trade secret and trademark protection of our technologies in the United States and other jurisdictions, as well as successfully enforcing this intellectual property and defending this intellectual property against third-party challenges. In particular, we place considerable emphasis on obtaining patent protection for significant new technologies, products and processes in the United States and in foreign jurisdictions where we plan to use such technologies.

Our patent position involves complex legal and factual questions. Accordingly, we cannot predict the breadth of claims that may be allowed or enforced in our patents or in third-party patents. Patents may not be issued for any pending or future pending patent applications owned by or licensed to us, and claims allowed under any issued patent or future issued patent owned or licensed by us may not be valid or sufficiently broad to protect our technologies. Moreover, we may be unable to protect certain of our intellectual property in the United States or in foreign countries, and there will be many countries in which we will choose not to file or maintain patents because of the costs involved. Foreign jurisdictions may not afford the same protections as U.S. law, and we cannot ensure that foreign patent applications will have the same scope as the U.S. patents. Additionally, any issued patents owned by or licensed to us now or in the future may be challenged, invalidated, or circumvented, and the rights under such patents may not provide us with competitive advantages. Competitors may also design around our technology or develop competing technologies.

We could incur substantial costs to bring suits or other proceedings in which we may assert our patent rights against others or defend ourselves in suits brought against us. An unfavorable outcome of any such litigation could have a material adverse effect on our business and results of operations.

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

We also rely on trademarks to establish a market identity for our products. We may not obtain registrations for our pending or future trademark applications, and there will be many countries in which we will choose not to file trademark registration applications because of the costs of filing and prosecuting such applications. Enforcing or defending our registered and unregistered trademarks might result in significant litigation costs and damages, including the inability to continue using certain trademarks. In the event that we are unable to continue using certain trademarks, we may be forced to rebrand our products, which could result in the loss of brand recognition, and could require us to devote resources to advertise and market brands.

A substantial portion of the technology used in our business is or may be owned by or subject to retained rights of third parties.

Some of our intellectual property rights have been licensed from academic institutions. The academic institutions generally have the right to terminate our license in the event that we fail to make required payments or otherwise breach the applicable agreements. We also have, and expect to have in the future, research and development agreements with academic institutions that may develop intellectual property. The academic institutions generally retain rights over the technology for use in certain fields. Even though the rights of the academic institutions are generally limited to the noncommercial academic and research fields, they may obtain rights to commercially exploit developed intellectual property in limited instances. Furthermore, our rights to intellectual property developed under research and development agreements with academic institutions are not always certain, and may be in the form of an option to obtain license rights to such intellectual property. If we fail to exercise our option rights timely and/or we are unable to negotiate a license agreement, the academic institution may offer a license to the developed intellectual property to third parties for commercial purposes. Any such commercial exploitation could adversely affect our competitive position and have a material adverse effect on our business.

Some of our patents may cover inventions that were conceived or first reduced to practice under, or in connection with, government contracts or other federal funding agreements. The government may retain rights that could have a significant impact on the commercial value of the developed intellectual property.

Our employees, consultants, collaborators, customers and vendors who use our information and materials may develop new intellectual property relating to our products and technologies. We generally enter into agreements with such persons providing that inventions conceived by them in the course of rendering services to us will be our exclusive property or that we will have the option to license such rights. However, these agreements may not be honored and may not effectively assign intellectual property rights to us. Enforcing a claim that a party illegally obtained intellectual property rights is difficult, expensive and time consuming and the outcome is unpredictable. The failure to obtain such rights for Metabolix or to prevent others from obtaining such rights could adversely affect our competitive position.

Third parties may claim that we infringe their intellectual property, and we could suffer significant litigation or licensing expense as a result.

Various U.S. and foreign issued patents and pending patent applications owned by third parties exist in areas relevant to our products and processes. Such third parties may claim that we infringe their patents. For example, we are aware of competitors with patents relating to biobased plastics. Such competitors may allege that we infringe these patents. There could also be existing patents of which we are not aware that our technologies may inadvertently infringe. In addition, because patent applications are maintained in secrecy for a period of time after they are filed, there may be currently pending applications, unknown to us, which may later result in issued patents that our technologies may infringe. If third parties assert claims against us alleging that we infringe their patents or other intellectual property rights, we could incur substantial costs and diversion of management resources in defending these claims, and the defense of these claims could have a material adverse effect on our business. In addition, if third parties assert claims against us and we are unsuccessful in defending against these claims, these third parties may be awarded substantial damages, as well as injunctive or other equitable relief against us, which could effectively block our ability to make, use, sell, distribute, or market our products and services in the United States or abroad. We cannot currently predict whether a third party will assert a claim against us, or pursue infringement litigation against us; nor can we predict the ultimate outcome of any such potential claims or litigation.

In the event that a claim relating to intellectual property is asserted against us, or third parties not affiliated with us hold pending or issued patents that relate to our products or technology, we may seek licenses to such intellectual property or challenge those patents. However, we may be unable to obtain these licenses on acceptable terms, if at all, and our challenge of the patents may be unsuccessful. Our failure to obtain the necessary licenses or other rights could prevent the sale, manufacture, or distribution of some of our products and, therefore, could have a material adverse effect on our business.

We rely in part on trade secrets to protect our technology, and our failure to obtain or maintain trade secret protection could limit our ability to compete.

We rely on trade secrets to protect some of our technology and proprietary information, especially where we believe patent protection is not appropriate or obtainable. However, trade secrets are difficult to protect. We vigorously pursue confidentiality agreements and contractual provisions with our collaborators, potential customers, employees, and consultants to protect our trade secrets and proprietary know-how. These agreements may be breached and we may not have adequate remedies for such breach. While we use reasonable efforts to protect our trade secrets, our employees, consultants, contractors or scientific and other advisors, our potential customers, or our strategic partners may unintentionally or willfully disclose our proprietary information to competitors. If we were to enforce a claim that a third party had illegally obtained and was using our trade secrets, our enforcement efforts would be expensive and time consuming, and the outcome would be unpredictable. In addition, courts outside the United States are sometimes unwilling to protect trade secrets. Moreover, if our competitors independently develop equivalent knowledge, methods and know-how, it will be more difficult for us to enforce our rights and our business could be harmed.

Risks Relating to Owning our Common Stock

An active trading market for our common stock may not be available on a consistent basis to provide stockholders with adequate liquidity. Our stock price may be extremely volatile, and our stockholders could lose a significant part of their investment.

An active trading market for shares of our common stock may not be sustained on a consistent basis. The public trading price for our common stock will be affected by a number of factors, including:

- reported progress of our business and technology development, relative to investor expectations;
- changes in earnings estimates, investors' perceptions, recommendations by securities analysts or our failure to achieve analysts' earnings estimates;
- quarterly variations in our or our competitors' results of operations;
- general market conditions and other factors unrelated to our operating performance or the operating performance of our competitors;
- future sales of our common stock;
- future issuance and/or sale of preferred stock;
- announcements by us, or our competitors, of acquisitions, new products, significant contracts, commercial relationships or capital commitments;
- commencement of, or involvement in, litigation;
- any major change in our board of directors or management;
- changes in governmental regulations or in the status of our regulatory approvals;
- announcements related to patents issued to us or our competitors and to litigation involving our intellectual property;

- a lack of, limited, or negative industry or security analyst coverage;
- developments in our industry and general economic conditions; and
- the other factors described elsewhere in these "Risk Factors."

As a result of these factors, our stockholders may not be able to resell their shares at, or above, their purchase price. In addition, the stock prices of many technology companies have experienced wide fluctuations that have often been unrelated to the operating performance of those companies. The valuations of many biotechnology companies without consistent product revenues and earnings are extraordinarily high based on conventional valuation standards, such as price to earnings and price to sales ratios. These trading prices and valuations may not be sustained. Any negative change in the public's perception of the prospects of biotechnology companies could depress our stock price regardless of our results of operations. These factors may have a material adverse effect on the market price of our common stock.

Our financial results may vary significantly from period to period which may reduce our stock price.

Our financial results may fluctuate as a result of a number of factors, many of which are outside of our control, which may cause the market price of our common stock to fall. For these reasons, comparing our operating results on a period to period basis may not be meaningful, and you should not rely on our past results as an indication of our future performance. Our financial results may be negatively affected by any of the risk factors listed in this "Risk Factors" section and, in particular, the following risks:

- failure to produce commercialized products or to find customers for these products;
- the unpredictability of government funding for some of our programs;
- failure to estimate or control costs;
- difficulties in collecting payments due from customers or licensees;
- adverse judgments or settlements in legal disputes;
- expenses related to acquisitions, mergers or joint ventures; and
- other one-time financial charges.

Provisions in our certificate of incorporation and by-laws and Delaware law and our shareholder rights plan might discourage, delay or prevent a change of control of our company or changes in our management and, therefore, depress the trading price of our common stock.

Provisions of our certificate of incorporation and by-laws and Delaware law may discourage, delay or prevent a merger, acquisition or other change in control that stockholders may consider favorable, including transactions in which our stockholders might otherwise receive a premium for their shares of our common stock. These provisions may also prevent or frustrate attempts by our stockholders to replace or remove our management.

We have adopted a shareholder rights plan, the purpose of which is, among other things, to enhance our Board's ability to protect shareholder interests and to ensure that shareholders receive fair treatment in the event any coercive takeover attempt of the Company is made in the future. The adoption of the plan was intended, in part, to address the risk that a third party could acquire our Company at a price that does not reflect the full value of our business and our technologies. The shareholder rights plan could make it more difficult for a third party to acquire, or could discourage a third party from acquiring, our Company or a large block of our Company's common stock.

In addition, Section 203 of the Delaware General Corporation Law prohibits a publicly-held Delaware corporation from engaging in a business combination with an interested stockholder,

generally a person which together with its affiliates owns, or within the last three years has owned, 15% of our voting stock, for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner.

The existence of the foregoing provisions and anti-takeover measures could limit the price that investors might be willing to pay in the future for shares of our common stock. They could also deter potential acquirers of our Company, thereby reducing the likelihood that our stockholders could receive a premium for their common stock in an acquisition.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We do not own any real property. We currently lease approximately 28,000 square feet of office and research and development space at 21 Erie Street, Cambridge, Massachusetts. Our lease for this facility expires in May 2014, with the option to renew for two additional five year periods. We also lease approximately 13,700 square feet of office and laboratory space at 650 Suffolk Street, Lowell, Massachusetts where the majority of our general and administrative employees are located. Our lease for this facility expires in May 2014. Our wholly-owned subsidiary, Metabolix GmbH ("GMBH"), leases approximately 2,500 square feet of office space in Cologne, Germany. The lease has a termination provision that allows the GMBH to end the lease at a fiscal quarter end with a six month notice period. Our wholly-owned subsidiary, Metabolix Oilseeds, Inc. ("MOI"), located in Saskatoon, Saskatchewan, Canada, leases approximately 3,300 square feet of office, laboratory and greenhouse space. MOI's leases for these facilities expire in August 2013.

ITEM 3. LEGAL PROCEEDINGS

On February 17, 2012, a purported shareholder class action, Hilary Coyne v. Metabolix, Inc., Richard P. Eno, and Joseph Hill, Civil Action 1:12-cv-10318 (the "class action"), was filed in the United States District Court for the District of Massachusetts, naming the Company and certain officers of the Company as defendants. The class action alleges that the Company made material misrepresentations and/or omissions of material fact in the Company's disclosures during the period from March 10, 2010 through its January 12, 2012 press release announcing that ADM had given notice of termination of the Telles joint venture for PHA biopolymers, all in violation of Sections 10(b) and 20(a) of the Securities Exchange Act and Rule 10b-5. The class action seeks certification as a class action, compensatory damages in an unspecified amount, plaintiff's costs and attorneys' fees, and unspecified equitable or injunctive relief. The plaintiff filed an amended complaint on October 15, 2012 that supersedes the initial complaint and demands identical relief based on substantially similar allegations. On December 14, 2012, the defendants filed a motion to dismiss the amended complaint, which plaintiffs opposed, and on which the court has not yet ruled.

On March 7, 2012, a purported derivative lawsuit, Childs v. Kouba et al., Civil Action 12-0892 (the "derivative action"), was filed in Massachusetts Superior Court for Middlesex County, on behalf of the Company against members of the Company's Board of Directors for alleged breaches of their fiduciary duties and based on a nearly identical set of alleged facts as those asserted in the class action. The derivative action seeks compensatory damages in an unspecified amount, plaintiff's costs and attorneys' fees, and unspecified equitable or injunctive relief. The parties in the derivative action filed and the court granted a joint motion to stay the derivative action until after resolution of the anticipated motion to dismiss in the class action.

We are currently unable to assess the probability of loss or estimate a range of potential loss, if any, associated with these matters because they are at an early stage.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

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

Market Information

Our common stock is traded on the NASDAQ Global Market under the symbol "MBLX." The following table sets forth, for the period indicated, the high and low sales prices for our common stock, as reported by the NASDAQ Global Market, for our two most recent fiscal years:

	Common Stock Price			
	2012		2011	
	High	Low	High	Low
First Quarter	$ 6.10	$ 2.34	$ 12.78	$ 7.77
Second Quarter	3.20	1.80	10.95	6.50
Third Quarter	2.32	1.32	7.74	4.08
Fourth Quarter	2.19	1.07	5.54	3.28

The close price of our common stock, as reported by the NASDAQ Global Market, was $2.04 on March 22, 2013.

Stockholders

As of March 22, 2013, there were 34,365,227 shares of our common stock outstanding held by 48 stockholders of record.

Dividends

We have never declared or paid any cash dividends on our capital stock and do not expect to pay any cash dividends for the foreseeable future. We intend to use future earnings, if any, in the operation and expansion of our business. Any future determination relating to our dividend policy will be made at the discretion of our board of directors, based on our financial condition, results of operations, contractual restrictions, capital requirements, business properties, restrictions imposed by applicable law and other factors our board of directors may deem relevant.

Equity Compensation Plan Information

Please see Part III, Item 12, for information regarding securities authorized for issuance under our equity compensation plans.

Unregistered Sales of Securities

On October 4, 2012, the Company issued 56,390 shares of common stock to participants in its Metabolix, Inc. 401(k) Plan as a matching contribution. The issuance of these securities is exempt from registration pursuant to Section 3(a)(2) of the Securities Act of 1933 as excluded securities.

Issuer Purchases of Equity Securities

During the quarter ended December 31, 2012, there were no repurchases made by us or on our behalf, or by any "affiliated purchasers," of shares of our common stock.

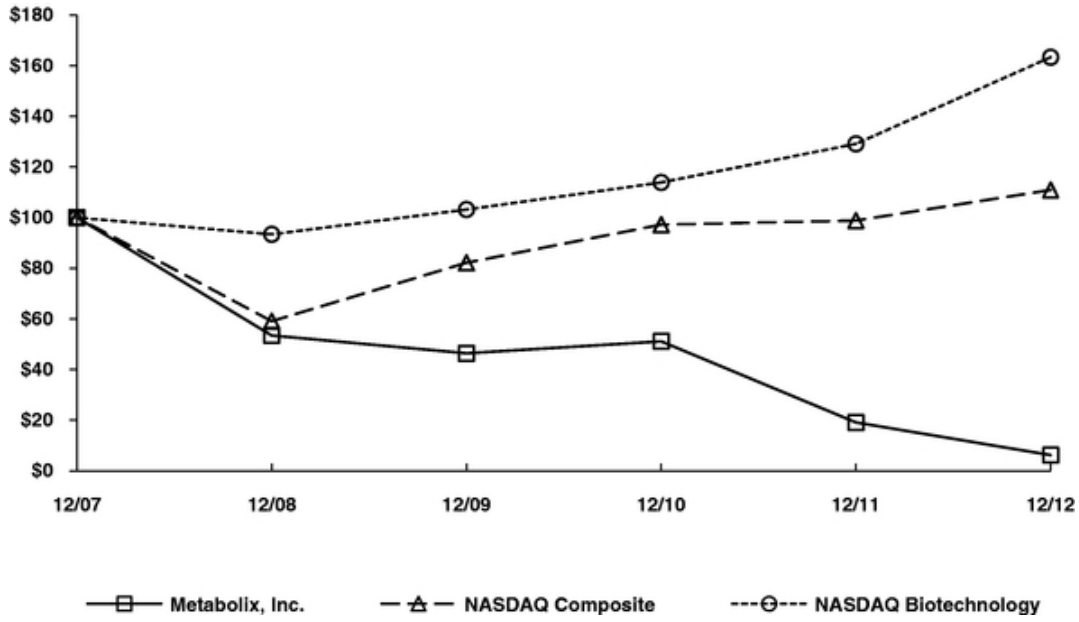
Stock Performance Graph

This graph compares the percentage change in cumulative total stockholder return (change in stock price plus reinvested dividends) on our common stock with the cumulative total return for the

NASDAQ Composite Index and the NASDAQ Biotechnology index for the periods set below. This graph assumes a $100 investment in our common stock at a closing price of $23.80 per share on December 31, 2007. The comparisons in the graph are not intended to forecast or be indicative of possible future performance of our common stock.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*

Among Metabolix, Inc., the NASDAQ Composite Index, and the NASDAQ Biotechnology Index



* $100 invested on 12/31/07 in stock or index, including reinvestment of dividends.

	Year ended December 31,					
	2007	2008	2009	2010	2011	2012
Metabolix, Inc.	$ 100.00	$ 53.45	$ 46.43	$ 51.13	$ 19.12	$ 6.22
NASDAQ Composite	100.00	59.10	82.19	97.23	98.85	110.91
NASDAQ Biotechnology	100.00	93.40	103.19	113.89	129.12	163.33

ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA

The selected condensed consolidated statement of operations data for the years ended December 31, 2012, 2011, and 2010 and balance sheet data as of December 31, 2012 and 2011 have been derived from our consolidated financial statements and related notes, which are included elsewhere in this report, and have been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as indicated in their report. The selected condensed consolidated statement of operations data for the years ended December 31, 2009 and 2008 and the balance sheet data as of December 31, 2010, 2009 and 2008 have been derived from our audited financial statements that are not included in this report. The selected financial data set forth below should be read in conjunction with our financial statements, the related notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this report. The historical results are not necessarily indicative of the results to be expected for any future period.

	Year ended December 31,				
	2012	2011	2010	2009	2008
	(In thousands, except share and per share data)				
Statement of operations data:					
Total revenue	$ 42,316(1)	$ 1,425	$ 448	$ 1,425	$ 1,555
Costs and expenses:					
Cost of product revenue	1,426	—	—	—	—
Research and development expenses	23,177	24,445	23,673	24,471	24,667
Selling, general and administrative expenses	14,110	15,841	15,714	15,683	15,780
Total costs and expenses	38,713	40,286	39,387	40,154	40,447
Income (loss) from operations	3,603	(38,861)	(38,939)	(38,729)	(38,892)
Other income, net	27	76	136	772	2,887
Net income (loss)	$ 3,630	$ (38,785)	$ (38,803)	$ (37,957)	$ (36,005)
Net income (loss) per share, basic	$ 0.11	$ (1.24)	$ (1.45)	$ (1.62)	$ (1.58)
Net income (loss) per share, diluted	$ 0.11	$ (1.24)	$ (1.45)	$ (1.62)	$ (1.58)
Number of shares used in per share calculations, basic	34,217,298	31,257,376	26,773,755	23,435,264	22,839,913
Number of shares used in per share calculations, diluted	34,279,779	31,257,376	26,773,755	23,435,264	22,839,913

(1) In 2012, we recognized $38,885 of deferred revenue associated with the termination of our commercial alliance with Archer Daniels Midland Company.

	Year ended December 31,				
	2012	2011	2010	2009	2008
			(In thousands)		
Balance Sheet Information:					
Cash, cash equivalents and short-term investments	$ 43,773	$ 76,855	$ 61,574	$ 92,202	$ 91,096
Total assets	53,510	82,912	66,771	97,554	96,946
Long-term deferred revenue	—	35,944	36,207	37,299	32,440
Other long-term obligations	186	340	493	649	805
Total liabilities	6,170	43,449	43,095	42,510	37,855
Accumulated deficit	(242,032)	(245,662)	(206,877)	(168,074)	(130,117)
Total stockholders' equity	47,340	39,463	23,676	55,044	59,091

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

The following discussion and analysis should be read in conjunction with the Consolidated Financial Statements and Notes thereto included in this Annual Report on Form 10-K.

All dollar amounts are stated in thousands.

Overview

Metabolix is an innovation-driven bioscience company focused on delivering sustainable solutions to the plastics, chemicals and energy industries. We have core capabilities in microbial genetics, fermentation process engineering, chemical engineering, polymer science, plant genetics and botanical science, and we have assembled these capabilities in a way that has allowed us to integrate our biotechnology research with real world chemical engineering and industrial practice. In addition, we have created an extensive intellectual property portfolio to protect our innovations and, together with our technology, to serve as a valuable foundation for future industry collaborations.

The markets for petroleum-based plastics, chemicals and fuels are among the largest in the global economy. Issues associated with the prolonged use of petroleum-based products include plastic waste management and pollution, limited fossil fuel availability and price volatility, and global warming and climate change. We believe that a substantial global market opportunity exists to develop and commercialize our technology to produce sustainable, renewable alternatives to petroleum-based products including advanced biopolymers, biobased industrial chemicals and bioenergy.

Metabolix was formed to leverage the ability of natural systems to produce complex biopolymers from renewable resources. We have focused on a family of biopolymers found in nature called polyhydroxyalkanoates, or ("PHAs"), which occur naturally in living organisms and are chemically similar to polyesters. We have demonstrated the production of PHAs at the industrial scale to produce PHA biopolymers and biobased industrial chemicals, as well as production of PHB, a subclass of PHA biopolymer, in agriculturally significant crop plants.

From 2004 through 2011, we developed and began commercialization of our PHA biopolymers through a technology alliance and subsequent commercial alliance with a wholly-owned subsidiary of Archer Daniels Midland Company ("ADM"), one of the largest agricultural processors in the world. Under the commercial alliance, ADM was responsible for resin manufacturing, and Metabolix was primarily responsible for product development, compounding, marketing and sales. Through this alliance, the companies established a joint venture company, Telles, LLC ("Telles"), to commercialize PHA biopolymer products. ADM completed construction of the initial phase of its commercial manufacturing facility, which began production of biopolymers for the joint venture in 2010. Telles conducted significant product and commercial development activities with potential customers,

marketed and sold product to customers under the tradenames Mirel™ and Mvera™, and developed a network of business partners and distributors before ADM terminated the commercial alliance early in 2012.

In 2012, our objective was to advance business discussions with third parties with the goal of establishing a new commercial model for our PHA biopolymers, to work closely with our core customers to provide product from existing inventory during the transition phase and ensure ongoing development of PHA biopolymer products, to narrow our market development focus to high value market segments as the foundation to successfully build the business, and to establish a new manufacturing and supply chain properly sized to our business.

After termination of the Telles joint venture, we retained significant rights and assets associated with the PHA biopolymers business consistent with our intent to launch the business using a new commercial model, continuing business operations, marketing biopolymer products, and identifying alternate manufacturing capability. We hold exclusive rights to the Metabolix technology and intellectual property used in the joint venture. We acquired all of Telles's product inventory and compounding raw materials totaling more than 5 million pounds, all product certifications and all product trademarks including MirelTM and MveraTM, and we retained all co-funded pilot plant equipment in locations outside of the Commercial Manufacturing Facility in Clinton, Iowa. We have no obligations under the ledger account totaling $433 million which was funded by ADM to construct the Commercial Manufacturing Facility and to provide working capital to Telles.

Through Telles, we learned extremely valuable information about how customers and brand owners are envisioning the use of PHA biopolymers in their products. Based on these interactions, we remain confident that Metabolix biopolymers provide an important solution to those wishing to reduce dependence on petroleum, reduce plastic waste in the environment, and utilize new solutions to meet sustainable packaging goals. We have demonstrated that our biopolymers, marketed under the Mirel and Mvera brands, share the physical properties of petroleum-based resins for performance and durability and can be processed using existing equipment and post-processing techniques. The difference is that Metabolix biopolymers display unique biodegradability properties. Mirel is certified to biodegrade in soil and water environments, as well as home composting and industrial composting facilities (in areas where such facilities are available). Mvera is a certified compostable film grade biopolymer intended for industrial composting.

After termination of the ADM commercial alliance in early 2012, we restructured the biopolymers business retaining a core team in our biopolymers group to provide continuity with technology, manufacturing process, and markets. During 2012, we established Metabolix GmbH, a subsidiary located in Cologne, Germany to serve as a focal point for our commercial activities in Europe. This cost effective location is intended to enable us to directly access the European market, which is the largest for bioplastics. We also took steps toward establishing a new commercial model for our PHA biopolymers business. We worked closely with our core customers to supply product from existing inventory as a bridge to new supply. We evaluated the potential applications for our biopolymer products and narrowed our market development focus to three high value market segments (i) film and bag applications, (ii) performance additives, and (iii) functional biodegradation. In March 2012, we began directly booking product sales and shipping product from inventory to our customers. During the second half of the year, we developed, sampled and launched two new products: Mvera B5008, a compostable film grade, and I6001, a polymeric modifier for polyvinyl chloride ("PVC"). In addition, we signed an agreement for demonstration production with Antibioticos SA, a toll manufacturer, based in Leon, Spain.

During 2013, we expect to continue to use existing inventory to continue to develop the market and to supply new and existing customers. We continue to explore alternative options to establish a new biopolymer manufacturing and supply chain properly sized to our business.

For our second platform, we are developing C4 and C3 chemicals from biobased sources, not the fossil fuels that are currently used to produce most industrial chemicals today. Our process for creating biobased industrial C4 and C3 chemicals involves engineering metabolic pathways into microbes that, in a fermentation process, produce specific PHA structures that serve as precursors for the chemicals. Through our PHA technology, we are able to control the microbe biology to achieve high concentrations of specific, naturally-occurring PHA that accumulate inside cells as they metabolize sugars. This intracellular accumulation of the biopolymers inside the microbes is a unique and differentiating aspect of our technology. When the fermentation is completed, we use a novel internally developed recovery process known as "FAST" (fast-acting, selective thermolysis) that converts the biopolymer to the target chemical using heat.

During 2009, we completed all work under our U.S. Department of Commerce National Institute of Standards and Technology grant, a $2 million grant aimed at producing C4 chemicals from renewable sources. We were able to achieve all of the technical milestones outlined in this grant. In 2010, we continued to scale up our C4 chemicals technology and continued efforts on chemical recovery and purification. We made progress toward production of biobased gamma-butyrolactone ("GBL") samples for shipment to potential customers and we expanded exploratory partnership discussions.

In 2011, we entered into a joint development agreement with CJ CheilJedang ("CJ") to continue to advance and refine our production technology and assess investment options for the commercialization of biobased C4 chemicals via fermentation. During this agreement, we developed a detailed market and economic analysis examining all aspects of an investment to commercialize biobased C4 chemicals.

In the C4 program, we have produced GBL at industrial scale and demonstrated a chemical profile that meets or exceeds the existing industrial specifications. In 2012, we completed the preliminary design for a commercial scale plant to enable production of biobased GBL and, through an established conversion process, butanediol ("BDO"). This plan, which could be implemented under a potential future collaboration, includes specifications for all of the components of our fermentation and recovery process. In conjunction with our technical progress, we expect to continue discussions with industry leaders with the goal of forming the industry alliances necessary to successfully bring our biobased C4 industrial chemicals, including GBL and BDO, into commercial production.

We believe that developing and commercializing biobased C3 chemicals could represent another attractive market for our technology. In 2011, we undertook a market analysis of the global market for acrylic acid, a C3 chemical, to assess the market participants, renewable technology competition, economics, intellectual property status, and end markets.

In 2012, we continued scale up of fermentation and optimization of microbial strains to produce biobased C3 chemicals. We also successfully scaled-up recovery of acrylic acid from dried biomass using the "FAST" process in our Cambridge laboratory. We also provided sample quantities of dried biomass for conversion to biobased acrylic acid for customer evaluation. We believe that strategic alliances will be required to commercialize C3 chemicals, and in 2013, we expect to continue to engage in partnership discussions.

In our third technology platform, we are harnessing the renewable nature of plants to make bioplastics, renewable chemicals and bioenergy from crops. The focal point of our plant technology efforts is around polyhydroxybutyrate (PHB), the simplest member of the broad polyhydroxyalkanoate (PHA) family of biopolymers. While applications for PHAs have focused mainly on their use as biodegradable bioplastics, these polymers have a number of other unique features that will allow their use in other applications, such as the production of chemical intermediates and their use as value-added animal feeds. We are creating proprietary systems to produce PHB in high quantity in the leaves of biomass crops or seeds of oilseed crops for these multiple applications.

Our work in crops highlights our leading edge capabilities and research targeting multi-gene expression and transformation of plants. Researchers at Metabolix have designed novel, multi-gene expression systems to increase production of PHB in plant tissue. The science behind this shift in metabolism is complex since the goal is to significantly increase production of PHB to be viable at industrial scale without impairing the ability of the plant to thrive in its natural environment. Using tobacco as a demonstration system for proof of concept, our researchers have published results demonstrating that production of high levels of PHB, up to 18% in leaves and 9% in the biomass of the entire tobacco plant, can be achieved. In addition to tobacco, we are developing different genetic engineering systems for different plant crops including switchgrass, oilseeds and sugarcane.

In 2011, Metabolix was awarded a $6 million grant by the U.S. Department of Energy ("DOE") to engineer switchgrass producing 10 percent PHB, by weight, in the whole plant and to develop methods to thermally convert the PHB-containing biomass to crotonic acid and a higher density residual biomass fraction for production of bioenergy. Crotonic acid is a platform chemical that can be readily converted through simple, known chemical conversion steps to a range of commodity chemical intermediates including propylene, butanol and maleic anhydride.

In 2012, Metabolix was awarded three new grants for leading-edge crop research targeting multi-gene expression and transformation of plants including important biofuel and food crops. Funding from these three grants is expected to total approximately $1.0 million and will run through 2014.

In 2013, we expect to continue to advance research under our grants, focused on increasing PHB production in switchgrass and developing a thermal conversion process for crotonic acid. We may also seek to establish alliances with partners to commercially exploit this platform. We are in the process of capturing intellectual property gained in our work in crops and will be evaluating the possibilities of monetizing that intellectual property.

We are developing an extensive portfolio of intellectual property covering our inventions in crop-based technology and have been awarded more than 30 patents in this area to date. In addition, Metabolix researchers and academic collaborators have published our research results in peer reviewed scientific journals.

We have incurred significant losses since our inception. As of December 31, 2012, our accumulated deficit from inception to date was $242,032 and total stockholders' equity was $47,340. We recognized net income of $3,630 in 2012, and net losses of $38,785 and $38,803 in 2011, and 2010, respectively.

Collaborative Arrangements

We are not currently participating in any collaborative arrangements. Our historical strategy for collaborative arrangements has been to retain substantial participation in the future economic value of our technology while receiving current cash payments to offset research and development costs and working capital needs. By their nature, our collaborative agreements have been complex, containing multiple elements covering a variety of present and future activities.

ADM Collaboration

From 2004 through 2011, we developed and began commercialization of our PHA biopolymers through a technology alliance and subsequent commercial alliance with ADM Polymer Corporation, a wholly-owned subsidiary of ADM, one of the largest agricultural processors in the world. The Commercial Alliance Agreement between Metabolix and ADM Polymer specified the terms and structure of the alliance. The agreement governed the activities and obligations of the parties to commercialize PHA biopolymers, which have been marketed under the brand names Mirel™ and Mvera™. These activities included the establishment of a joint venture company, Telles, LLC ("Telles"), to market and sell PHA biopolymers, the construction of a manufacturing facility capable of producing

110 million pounds of material annually (the "Commercial Manufacturing Facility"), the licensing of technology to Telles and to ADM, and the conducting of various research, development, manufacturing, sales and marketing, compounding and administrative services by the parties.

Telles was formed to: (i) serve as the commercial entity to establish and develop the commercial market for PHA biopolymers, and conduct the marketing and sales in accordance with the goals of the commercial alliance, (ii) assist in the coordination and integration of the manufacturing, compounding and marketing activities, and (iii) administer and account for financial matters on behalf of the parties. Metabolix and ADM each had a 50 percent ownership and voting interest in Telles.

Under the Commercial Alliance Agreement ADM was permitted, under limited circumstances, to terminate the alliance if a change in circumstances that was not reasonably within the control of ADM made the anticipated financial return from the project inadequate or too uncertain. The agreement provided that, upon termination by ADM due to a change in circumstances, Metabolix would be permitted to continue to produce and sell PHA biopolymers, and ADM would be required to perform manufacturing services for the Company for a period of time following the termination (subject to certain payment obligations to ADM). On January 9, 2012, ADM notified us that it was terminating the commercial alliance effective February 8, 2012. ADM had undertaken a strategic review of its business investments and activities and made the decision to focus resources outside of Telles. As the basis for the decision, ADM indicated to us that the projected financial returns from the alliance were too uncertain.

The Commercial Alliance Agreement with ADM limited the rights of both ADM and Metabolix to work with other parties or alone in developing or commercializing certain PHAs produced through fermentation. These exclusivity obligations ended upon termination of the alliance. Also, upon termination of the alliance, Metabolix intellectual property licenses to ADM Polymer and Telles ended, with Metabolix retaining all rights to its intellectual property. ADM retained its Commercial Manufacturing Facility located in Clinton, Iowa, previously used to produce PHA biopolymers for Telles.

Under the Technology Alliance and Option Agreement and Commercial Alliance Agreement, various payments were made to Metabolix by ADM as shown in the table below. All of these payments were recorded as deferred revenue on the Company's balance sheet and were expected to be recognized on a straight line basis over a period of approximately ten years in which Metabolix would fulfill its contractual obligations during the Commercial Phase of the Commercial Alliance Agreement.

Upfront payment	$ 3,000
Milestone payments	2,000
Support payments	22,050
Cost sharing payments for pre-commercial manufacturing plant construction and operations	11,835
Total	$ 38,885

The Company had no further performance obligations in connection with the commercial alliance after its termination, and as a result, the entire $38,885 of deferred revenue was recognized by the Company during its fiscal quarter ended March 31, 2012.

After termination of the Commercial Alliance Agreement, the parties entered into a Settlement Agreement in which the parties agreed to specific terms related to the winding up and dissolution of Telles. Under this Settlement Agreement, we purchased certain assets of the joint venture for $2,982 including Telles's entire inventory, exclusive and perpetual rights to all of Telles's trademarks, and all product registrations, certifications and approvals for Telles's PHA biopolymers. Pursuant to the Settlement Agreement, ADM relinquished any claims with respect to certain co-funded equipment

previously acquired by Metabolix and situated at locations other than the Clinton, Iowa Commercial Manufacturing Facility, and Metabolix and Telles waived any rights to post-termination manufacturing and fermentation services under the Commercial Alliance Agreement.

Pursuant to the Settlement Agreement, Telles paid to ADM an amount equal to the aggregate cash balances of Telles totaling $3,778 on the date of the Settlement Agreement, minus $100 retained by Telles to settle any remaining trade obligations. The remaining trade obligations of Telles at the date of execution of the Settlement Agreement did not exceed $100. In the event that ADM is required to repay to Telles or to pay to any creditor of Telles any amounts included in the $2,982 purchase price or the $3,678 distributed to ADM by Telles pursuant to the Settlement Agreement, Metabolix is obligated to reimburse ADM in an amount equal to 50% of such payments, provided that in no event would the amount to be so paid by Metabolix exceed the total of the $2,982 purchase price and the $3,678 Telles cash required to be so repaid or reimbursed by ADM. In February 2013, ADM notified us that Telles had been formally dissolved and that no third party creditor trade obligations had been paid. As a result, we believe that we are no longer contingently liable for any third party obligations stemming from our former ADM collaboration.

Government Grants

As of December 31, 2012, expected gross proceeds of $5,084 remain to be received under our U.S. and Canadian government grants, which include amounts for reimbursement to our subcontractors, as well as reimbursement for our employees' time, benefits and other expenses related to performance under the grants.

The status of our United States and Canadian government grants is as follows:

Program Title	Funding Agency	Total Government Funds	Total received through December 31, 2012	Remaining amount available as of December 31, 2012	Contract/Grant Expiration
Renewable Enhanced Feedstocks For Advanced Biofuels And Bioproducts	Department of Energy	$ 6,000	$ 1,994	$ 4,006	June 2014
Subcontract from University of California (Los Angeles) project funded by ARPA-E entitled "Plants Engineered to Replace Oil: Energy Plant Design"	Department of Energy	566	—	566	September 2014
Capacity Building for Commercial-Scale PHB Camelina Development	National Research Council Canada	261	10	251	March 2014
Subcontract from University of Massachusetts (Amherst) project funded by ARPA-E entitled "Development of a Dedicated High Value Biofuels Crop"	Department of Energy	259	114	145	June 2013
Advanced Technologies For Engineering Of Camelina	Canadian Ministry of Agriculture	205	184	21	February 2013
Blow Molded Bioproducts From Renewable Plastics	Department of Agriculture	349	349	—	August 2012
Development of a Sustainable Value Added Fish Feed Using PHB Producing Camelina	National Research Council Canada	95	—	95	March 2014
Total		$ 7,735	$ 2,651	$ 5,084	

Critical Accounting Estimates and Judgments

Our consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, costs and expenses, and related disclosures. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ from these estimates.

We believe that of our significant accounting policies, which are described in Note 2 to our consolidated financial statements, the accounting policies described below involve a greater degree of judgment and complexity. Accordingly, we believe that the accounting policies described below are the most critical to aid in fully understanding and evaluating our consolidated financial condition and results of operations.

Revenue Recognition

During March 2012, we initiated biopolymer product sales to customers for the first time. Our policy is to recognize revenue when evidence of an arrangement exists, title has passed or services have been rendered, the selling price is fixed or determinable and collectability is reasonably assured. Revenue from product sales to customers is recognized when all elements of the sale have been delivered. During the six months ended June 30, 2012, we did not provide for rights of return to customers on product sales, except for situations where the product did not meet the technical specifications. We modified our product return policy prospectively during the quarter ending September 30, 2012 to allow discretion in accepting returns during a period of sixty days after product delivery. Until sufficient experience is developed on which to base an estimate of product returns, we defer recognition of product revenue and related costs until the later of (i) the end of the sixty day period or (ii) when the customer payment has been received.

We recognize government grants received as revenue as the grants are central to the Company's ongoing operations. Revenue is earned as research expenses related to the grants are incurred. Funds received from government grants in advance of work being performed are recorded as deferred revenue until earned. For revenue previously received under our arrangements with ADM, we recognized revenue in accordance with the accounting guidance on revenue recognition and revenue arrangements with multiple deliverables.

Our discontinued arrangement with ADM contained multiple elements including obligations for us to provide future compounding services, sales and marketing services, and certain research and development activities. We determined that these elements could not be separated and accounted for individually as separate units of accounting. Therefore payments received from ADM through December 31, 2011 were classified as deferred revenue at the respective balance sheet dates. We expected that this deferred revenue would begin to be recognized upon achievement of the contractual First Commercial Sale and all amounts would be recognized on a straight line basis over the estimated period, of approximately ten years, in which our obligations would be fulfilled in accordance with the term of the Commercial Alliance Agreement. Effective with the termination of the alliance in February of 2012 we recognized all of the deferred revenue related to the alliance agreements with ADM in the first quarter of 2012.

Fees to license the use of our proprietary and licensed technologies are recognized only after both the license period has commenced and the licensed technology, if any, has been delivered to the licensee. Royalty revenue is recognized when it becomes determinable and collectability is reasonably assured, otherwise we recognize royalty revenue upon receipt of payment.

Inventory

During March 2012, we acquired raw material and finished goods inventory of biopolymer from Telles, LLC as described above. Our adopted inventory policies as a result of this transaction are to state inventory at the lower of cost or market and to value inventory using the average cost method. We analyze our inventory levels quarterly and write down, to cost of product revenue, inventory that has become obsolete, inventory in excess of expected sales requirements or inventory that fails to meet commercial sales specifications.

Stock-Based Compensation

The accounting standard for stock-based compensation requires that all stock-based awards to employees be recognized as an expense in the consolidated financial statements and that such expense be measured at the fair value of the award.

Determining the appropriate fair value model and calculating the fair value of stock-based payment awards requires the use of highly subjective assumptions, including the expected life of the stock-based payment awards and stock price volatility. We use the Black-Scholes option-pricing model to value our option grants and determine the related compensation expense. The assumptions used in calculating the fair value of stock-based awards represent management's best estimates, but the estimates involve inherent uncertainties and the application of management judgment. As a result, if factors change, and we use different assumptions, our stock-based compensation expense could be materially different in the future. See Note 12 to the consolidated financial statements for further discussion on the key assumptions used to determine the fair values of option grants pursuant to the Black-Scholes option pricing model.

We account for stock compensation arrangements with non-employees in accordance with the accounting standard for equity instruments that are issued to other than employees for acquiring, or in conjunction with selling, goods or services, using a fair value approach. For stock options granted to non-employees, the fair value of the stock options is estimated using the Black-Scholes valuation model. Stock-based compensation expense is recognized over the period of expected service by the non-employee. As the service is performed, we are required to update these assumptions and periodically revalue unvested options and make adjustments to the stock-based compensation expense using the new valuation. These adjustments may result in higher or lower stock-based compensation expense than originally estimated or recorded, with a corresponding increase or decrease in compensation expense in the statement of operations. Ultimately, the final compensation charge for each option grant to non-employees is unknown until those options have vested or services have been completed.

Results of Operations

Comparison of the Years Ended December 31, 2012 and 2011

Revenue

	Year ended December 31,		
	2012	2011	Change
Revenue from termination of ADM collaboration	$ 38,885	$ —	$ 38,885
Grant revenue	1,971	918	1,053
Product revenue	1,211	—	1,211
License fee and royalty revenue from related parties	152	447	(295)
License fee and royalty	97	60	37
Total revenue	$ 42,316	$ 1,425	$ 40,891

Total revenue was $42,316 and $1,425 for the twelve months ended December 31, 2012 and 2011, respectively. During the twelve months ended December 31, 2012, we recognized $38,885 of previously deferred revenue related to our Telles joint venture with ADM that terminated effective February 8, 2012. This deferred revenue, which was previously expected to be recognized over an estimated ten year period as we met our contractual performance obligations, became immediately recognizable upon termination of the joint venture as we had no further performance obligations following termination. During the twelve months ended December 31, 2012 we recognized $1,971 of grant revenue compared to $918 in 2011. The increase in grant revenue for the twelve months ended December 31, 2012 was primarily attributable to increased revenue of $1,053 earned from our DOE Renewable Enhanced Feedstocks for Advanced Biofuels and Bioproducts ("REFABB") grant that commenced in September 2011. During the twelve months ended December 31, 2012, we also recognized $1,211 of product revenue from sales of biopolymer inventory acquired in March 2012 from our terminated Telles joint

venture with ADM. There was no product revenue during the twelve months ended December 31, 2011, because revenue from Mirel product sales was recognized by Telles during that period. During the twelve months ended December 31, 2012 we recognized $152 of license fee and royalty revenue from related parties compared to $447 for the respective period in 2011. License fee and royalty revenue from related parties decreased due to a decline in royalties received under a licensing arrangement with Tepha, Inc. ("Tepha"), a related party.

We expect revenue to substantially decrease during 2013 due to the one-time recognition of the deferred revenue associated with the Telles joint venture in 2012. We anticipate that product revenue will increase in 2013 as we plan to continue to gain market acceptance for our products, although there will be fluctuations from quarter to quarter.

Costs and Expenses

	Year ended December 31,		
	2012	2011	Change
Cost of product revenue	$ 1,426	$ —	$ 1,426
Research and development expenses	23,177	24,445	(1,268)
Selling, general, and administrative expenses	14,110	15,841	(1,731)
Total costs and expense	$ 38,713	$ 40,286	$ (1,573)

Cost of Product Revenue

Cost of product revenue was $1,426 for the twelve months ended December 31, 2012. These costs primarily include inventory product costs of $474 associated with product revenue recognized during the period, plus current period freight and warehousing costs of $328 and $515, respectively. Cost of product revenue also includes the cost of sample inventory provided to prospective customers. Included in freight and warehousing costs are charges of approximately $291 incurred in connection with our consolidation of inventory into fewer, less-expensive warehouse locations and the cost of inventory shipments to our European warehouse. We also evaluate inventory for impairment on a regular basis, and at December 31, 2012, we recorded an expense of $138 primarily to reduce inventory for obsolete raw materials.

Although there will be fluctuations from quarter to quarter, we expect our overall cost of product revenue will increase during 2013 and beyond commensurate with our increasing product sales and as our relatively inexpensive inventory acquired from Telles is depleted and replaced with new full-cost manufactured inventory, including new resin grades that will enter the market during the upcoming year. During 2013 we may also incur costs for manufacturing demonstration batches through our suppliers. If this product meets commercial specifications, the cost of these demonstration batches will be charged to inventory. Due to the expected high per unit cost of these smaller manufacturing batches, any inventory costs in excess of our expected saleable market price will be immediately expensed as cost of product revenue.

Research and development expenses

Research and development expenses (including the cost of the ADM collaboration in 2011) was $23,177 and $24,445 for the twelve months ended December 31, 2012 and 2011, respectively. The decrease of $1,268 was primarily attributable to decreases in contract research, employee compensation and related benefit expenses, travel, consulting, licensing and depreciation expense partially offset by an increase in material production costs. Expenses related to material production costs were $4,455 and $2,054 for the twelve months ended December 31, 2012 and 2011, respectively. The increase of $2,401

was primarily due to expenses incurred in connection with the manufacturing demonstration agreement with Antibióticos. Contract research was $722 and $2,410 for the twelve months ended December 31, 2012 and 2011, respectively. The decrease of $1,688 was primarily attributable to lower contracted research support provided to the University of Massachusetts (Lowell) and other parties for biopolymer research and development, as a result of the termination of the Telles joint venture. Employee compensation and related benefit expenses were $12,047 and $12,847 for the twelve months ended December 31, 2012 and 2011, respectively. The decrease of $800 was primarily attributable to a decrease in employee headcount in response to the termination of the Telles joint venture. Travel expenses were $318 and $715 for the twelve months ended December 31, 2012 and 2011, respectively. The decrease of $397 was primarily the result of our reduced headcount and cost containment measures enacted by the Company. Consulting costs decreased to $539 from $769 for the twelve months ended December 31, 2012 and 2011, respectively. The reduction of $230 was also primarily due to efforts made to reduce expenses as a result of the termination of the Telles joint venture. Licensing expense decreased to $271 from $532 for the twelve months ended December 31, 2012 and 2011, respectively, as certain licensing fee obligations reached their conclusion. Depreciation expense was $1,164 and $1,381 for the twelve months ended December 31, 2012 and 2011, respectively. The decrease of $217 was primarily due to property and equipment reaching full depreciation.

We expect our ongoing efforts to closely manage research and development costs will allow us to reduce our research and development expenses during 2013. Costs incurred during 2012 of $2.3 million in connection with the demonstration agreement with Antibióticos are not expected to reoccur at the same levels, if at all, during 2013. Pilot manufacturing costs incurred during 2012 to produce biopolymer and C4 chemicals are also expected to decrease during 2013. These reductions in research and development expenses may be partially offset by expenses to complete manufacturing demonstration batches at Antibióticos.

Selling, general, and administrative expenses

Selling, general, and administrative expenses were $14,110 and $15,841 for the twelve months ended December 31, 2012 and 2011, respectively. The decrease of $1,731 was primarily attributable to decreases in employee compensation and related benefit expenses, travel and consulting costs. Employee compensation and related benefit expenses were $7,858 and $9,014 for the twelve months ended December 31, 2012 and 2011, respectively. The decrease of $1,156 was primarily due to reduction of headcount in response to the termination of the Telles joint venture. Travel expense decreased to $502 from $787 for the twelve months ended December 31, 2012 and 2011, respectively. The decrease of $285 was primarily as a result of cost containment measures enacted by the Company in connection with the Telles joint venture termination. Consulting expense decreased to $792 from $965 for the twelve months ended December 31, 2012 and 2011, respectively. The decrease of $173 was attributable to a reduction in marketing and sales consulting services, also made in connection with the terminated joint venture.

We expect our selling, general and administrative expenses to increase during 2013 as we continue to expand our biopolymer sales and marketing activities, primarily in Europe.

Other Income (Net)

	Year ended December 31,		
	2012	2011	Change
Total other income (net)	$ 27	$ 76	$ (49)

Other income (expense) during both periods consisted primarily of income from our investments, offset by investment management and custodial fees.

Comparison of the Years Ended December 31, 2011 and 2010

Revenue

	Year ended December 31,		
	2011	2010	Change
Grant revenue	$ 918	$ 64	$ 854
License fee and royalty revenue from related parties	447	122	325
License fee and royalty	60	50	10
Research and development revenue	—	212	(212)
Total revenue	$ 1,425	$ 448	$ 977

Total revenue was $1,425 and $448 for the twelve months ended December 31, 2011 and 2010, respectively. During the twelve months ended December 31, 2011 we recognized $918 of grant revenue compared to $64 for the respective period in 2010. The increase in grant revenue for the twelve months ended December 31, 2011 was primarily generated from our DOE Renewable Enhanced Feedstocks for Advanced Biofuels and Bioproducts ("REFABB") grant and our Blow Molded Bioproducts from Renewable Plastics grant. During the twelve months ended December 31, 2011 we recognized $447 of license fee and royalty revenue from related parties compared to $122 for the respective period in 2010. License fee and royalty revenue from related parties increased primarily as a result of a royalty earned under a licensing agreement with Tepha, Inc., a related party. There was no research and development revenue during the twelve months ended December 31, 2011. During the twelve months ended December 31, 2010 research and development revenue was derived primarily from the delivery of product samples to potential customers. During the twelve months ended December 31, 2011 revenue from Mirel product samples was recognized by Telles.

Expense

	Year ended December 31,		
	2011	2010	Change
Research and development expenses, including cost of revenue	$ 24,445	$ 23,673	$ 772
Selling, general, and administrative expenses	15,841	15,714	127
Total operating expense	$ 40,286	$ 39,387	$ 899

Research and development expenses, including cost of revenue

Research and development expenses, including cost of revenue, were $24,445 and $23,673 for the twelve months ended December 31, 2011 and 2010, respectively. The increase of $772 was primarily attributable to an increase in contracted research, employee compensation and related benefit expenses and consulting services, partially offset by a decrease in material production costs. Expenses related to contracted research and development services were $2,410 and $1,710 for the twelve months ended December 31, 2011 and 2010, respectively. The increase of $700 was primarily due to an increase in product development work related to Mirel, industrial chemicals and plant science work performed in conjunction with our Department of Energy REFABB grant. A portion of expenses related to the REFABB grant are reimbursed to us by the U.S. Department of Energy and recorded as grant revenue.

Employee compensation and related benefit expenses were $12,847 and $12,561 for the twelve months ended December 31, 2011 and 2010, respectively. The increase of $286 was primarily attributable to annual compensation merit increases and hiring of new personnel to support our manufacturing process and research programs, including employees for our Canadian subsidiary. Consulting expenses were $769 and $383 for the twelve months ended December 31, 2011 and 2010, respectively. The increase of $386 was primarily related to increased product development activities within our biobased industrial chemicals platform. Material production costs decreased to $2,054 from $2,693 for the twelve months ended December 31, 2011 and 2010, respectively. The reduction of $639 was primarily due to shifting activity at our pre-commercial manufacturing facility to ADM's Commercial Manufacturing Facility, partially offset by an increase in material production costs incurred to produce C4 chemicals.

Selling, general, and administrative expenses

Selling, general, and administrative expenses were $15,841 and $15,714 for the twelve months ended December 31, 2011 and 2010, respectively. Selling, general, and administrative expenses were generally consistent for the two comparative years. The small increase was primarily due to employee recruiting and compensation expenses incurred during the year ended December 31, 2011.

Other Income (Net)

	Year ended December 31,		
	2011	2010	Change
Total other income (net)	$ 76	$ 136	$ (60)

Other income (net) during both periods consisted of interest income.

Liquidity and Capital Resources

Currently, we require cash to fund our working capital needs, to purchase capital assets and to pay our operating lease obligations.

The primary sources of our liquidity have been:

- equity financing;
- our strategic alliance with ADM;
- government grants; and
- interest earned on cash and short-term investments.

We have incurred significant expenses relating to our research and development efforts. As a result, we have incurred net losses since our inception. As of December 31, 2012, we had an accumulated deficit of $242,032. Our total unrestricted cash, cash equivalents and investments as of December 31, 2012 were $46,281 as compared to $78,358 at December 31, 2011. As of December 31, 2012, we had no outstanding debt.

Our cash and cash equivalents at December 31, 2012 were held for working capital purposes. We do not enter into investments for trading or speculative purposes. The primary objective of our investment activities is to preserve our capital. As of December 31, 2012, we had restricted cash of $594. Restricted cash consists of $494 held in connection with the lease agreement for our Cambridge, Massachusetts facility and $100 held in connection with our corporate credit card program. Investments are made in accordance with our corporate investment policy, as approved by our Board of Directors. Investments are limited to high quality corporate debt, U.S. Treasury bills and notes, bank debt obligations, municipal debt obligations and asset-backed securities. The policy establishes maturity

limits, concentration limits, and liquidity requirements. As of December 31, 2012, we were in compliance with this policy.

The Company held unrestricted cash, cash equivalents and investments of $46,281 at December 31, 2012. We believe that these resources and the cash to be generated from existing grants and expected product sales will be sufficient to meet our projected operating requirements for at least the next twelve months. We continue to face significant challenges and uncertainties and, as a result, our available capital resources may be consumed more rapidly than currently expected due to (a) lower than expected sales of our biopolymer products as a result of slow market adoption; (b) increases in costs related to the start-up and operation of commercial manufacturing operations with third parties; (c) changes we may make to the business that affect ongoing operating expenses; (d) changes we may make to our business strategy; (e) changes in our research and development spending plans; and (f) other items affecting our forecasted level of expenditures and use of cash resources. Accordingly, we may need to raise additional funds to support our operating and capital needs, and longer term, we will require significant additional financing to continue to fund our operations. We may attempt to obtain additional funding through public or private financing, collaborative arrangements with strategic partners, or through additional credit lines or other debt financing sources to increase the funds available to fund operations. However, we may not be able to secure such financing in a timely manner and on favorable terms, if at all. Furthermore, if the Company issues equity or debt securities to raise additional funds, our existing stockholders may experience dilution, and the new equity or debt securities may have rights, preferences and privileges senior to those of our existing stockholders. If we raise additional funds through collaboration, licensing or other similar arrangements, it may be necessary to relinquish valuable rights to our potential products or proprietary technologies, or grant licenses on terms that are not favorable to the Company. Without additional funds, we may be forced to delay, scale back or eliminate some of our sales and marketing efforts, research and development activities, or other operations and potentially delay product development in an effort to provide sufficient funds to continue our operations. If any of these events occurs, our ability to achieve our development and commercialization goals would be adversely affected.

Net cash used in operating activities was $31,736 for the year ended December 31, 2012 compared to net cash of $31,731 and $31,995 used in operating activities during 2011 and 2010, respectively. Although cash used for operating activities during 2012 was consistent with prior years, the Company acquired $3,204 of product inventory, net of sales and adjustments, primarily from its purchase of inventory from Telles in early 2012. This cash usage for inventory was offset during 2012 by reduced operating costs and cash received from higher government grant and product revenues.

Net cash of $25,018 was provided by investing activities during the twelve months ended December 31, 2012, compared to net cash of $8,908 used in investing activities during 2011 and $31,377 provided by investing activities during 2010. Net cash provided by investing activities during the twelve months ended December 31, 2012 included $84,303 provided by the sale and maturity of investments, partially offset by $58,933 used to purchase investments. Net cash used in investing activities during the twelve months ended December 31, 2011 included $107,477 used to purchase investments and $895 used to purchase capital equipment, partially offset by $99,464 provided by the sale and maturity of investments.

Net cash of $19 was provided by financing activities during the twelve months ended December 31, 2012, compared to net cash of $49,407 and $2,339 provided by investment activities during 2011 and 2010, respectively. Net cash provided by financing activities during 2012 and 2010 was solely attributable to the proceeds received from the exercise of stock options. Net cash provided by financing activities during 2011 was primarily attributable to net proceeds of $49,333 provided from our common stock offering that was completed during May 2011.

Off-Balance Sheet Arrangements

As of December 31, 2012, we had no off-balance sheet arrangements as defined in Item 303(a)(4) of the Securities and Exchange Commission's Regulation S-K.

Contractual Obligations

The following table summarizes our contractual obligations at December 31, 2012:

	Payments Due by Period				
	Total	Less than 1 year	1 - 3 years	3 - 5 years	More than 5 years
Operating lease obligations	$ 2,294	$ 1,744	$ 550	$ —	$ —
Purchase obligations	50	25	25	—	—
Total	$ 2,344	$ 1,769	$ 575	$ —	$ —

Our lease obligations relate to current office and laboratory space. The lease for our primary facility located on Erie Street in Cambridge Massachusetts will expire in May 2014. We have the option to extend this lease for two additional five-year periods at then current market rates.

In March 2007, we entered into a rental agreement to lease office and laboratory space in Lowell, Massachusetts to support our Telles joint venture with ADM. The lease was extended in February 2012 for an additional two years at its current rental rate and now will expire in May 2014.

In connection with the Telles termination, in the first quarter of 2012, the Company restructured its biopolymers business and downsized its operations to more appropriately align its 2012 business priorities and strategic plans with current cash and investment resources. In September 2012, the Company terminated the lease for its former corporate office located at One Kendall Square, Cambridge, Massachusetts, paying an early termination fee of $43. The lease had been contracted to end in May 2014.

During August 2010, we began to conduct research operations through a wholly-owned subsidiary, Metabolix Oilseeds, Inc. ("MOI"), located in Saskatoon, Saskatchewan, Canada. MOI has leased office, laboratory and greenhouse space in Saskatoon and conducts its industrial oilseed research there. These leases will expire in August 2013.

During March 2012, we initiated biopolymer product sales to customers for the first time. To support sales operations, we entered into a lease for office space in Cologne, Germany. This lease began in April 2012 for approximately 2,500 square feet of office space, and has a termination provision that allows the GMBH to end the lease at any fiscal quarter end with a six month notice period.

Related Party Transactions

We entered into sublicense agreements in 1999 and 2003 with Tepha Inc. ("Tepha"), a related party, to sublicense certain technology to Tepha. The sublicenses contains provisions for us to receive sublicense maintenance fees, milestone payments and royalties on sublicense product and sublicensing revenues received by Tepha.

See Note 8 to our consolidated financial statements for a full description of our related party transactions.

Effects of Inflation

Our assets are primarily monetary, consisting of cash, cash equivalents and investments. Because of their liquidity, these assets are not directly affected by inflation. Since we intend to retain and continue to use our equipment, furniture and fixtures and leasehold improvements, we believe that the incremental inflation related to replacement costs of such items will not materially affect our operations. However, the rate of inflation affects our expenses, such as those for employee compensation, which could increase our level of expenses and the rate at which we consume our financial resources.

Recent Accounting Standards Changes

For a discussion of recent accounting standards please read Note 2, Summary of Significant Accounting Policies, to our consolidated financial statements included in this report.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

Our exposure to market risk is confined to our cash, cash equivalents and marketable securities. The unrestricted cash and cash equivalents and marketable securities are held for working capital purposes. Our primary investment objective is capital preservation, with a secondary objective of generating income on such capital. We do not enter into investments for trading or speculative purposes.

Interest Rate Risk

We invest in high-quality financial instruments, primarily money market funds, federal agency notes, U.S. treasury notes, investment-grade commercial paper, and corporate debt securities. All of our interest-bearing securities are subject to interest rate risk and could decline in value if interest rates fluctuate. Because of the short-term maturities of our cash equivalents and short-term investments, we do not believe that an increase in market rates would have any significant impact on the realized value of our marketable securities. However, in a declining interest rate environment, as short-term investments mature, reinvestment occurs at less favorable interest rates which would negatively impact our investment income. Exposure to market rate risk for changes in interest rates relates to our unrestricted cash, cash equivalents and investments, totaling $46,281 at December 31, 2012. Based on a hypothetical 10% adverse movement in interest rates, the potential annual losses in future earnings and cash flows are estimated to be $12.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The consolidated financial statements and related financial statement schedules required to be filed are indexed on page F-1 and are incorporated herein.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Effectiveness of Disclosure Controls and Procedures

As of the end of the period covered by this Annual Report on Form 10-K, under the supervision of our Chief Executive Officer and our Chief Financial Officer, we evaluated the effectiveness of our disclosure controls and procedures, as such term is defined in Rule 13a-15(e) and Rule 15d-15(e) under the Exchange Act. Based on this evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that as of December 31, 2012 our disclosure controls and procedures are effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act (1) is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms, and (2) is accumulated and communicated to our management, including our Chief Executive Officer and our Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure. Our disclosure controls and procedures include components of our internal control over financial reporting. Management's assessment of the effectiveness of our internal control over financial reporting is expressed at the level of reasonable assurance because a control system, no matter how well designed and operated, can provide only reasonable, but not absolute, assurance that the control system's objectives will be met.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act. Our 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. Our internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets; (ii) provide reasonable assurance that transactions are recorded to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are made only in accordance with authorizations of our management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements.

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

Management assessed the effectiveness of our internal control over financial reporting as of December 31, 2012. In making this assessment, management used the criteria set forth in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Based on its assessment of internal control over financial reporting, management has concluded that, as of December 31, 2012, our internal control over financial reporting was effective 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.

The effectiveness of our internal control over financial reporting as of December 31, 2012 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is included herein.

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) of the Exchange Act that occurred during our last fiscal quarter in the period covered by this Annual Report on Form 10-K that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

Pursuant to General Instructions G to Form 10-K, the information required for Part III, Items 10, 11, 12, 13 and 14, is incorporated herein by reference from the Company's proxy statement for the Annual Meeting of Stockholders to be held on May 30, 2013 which is expected to be filed not later than 120 days after the fiscal year end covered by this Form 10-K.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) The following documents are filed as part of this Report:

(1) **Financial Statements**

See Index to Financial Statements on page F-1.

(2) **Supplemental Schedules**

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

(3) **Exhibits**

See Item 15(b) below.

(b) The following exhibits are filed as part of, or incorporated by reference into, this annual report on Form 10-K:

Exhibit Number	Description
3.1(1)	Amended and Restated Certificate of Incorporation of the Registrant.
3.3(1)	Amended and Restated By-laws of the Registrant.
3.4(5)	Certificate of Designations, Preferences and Rights of a Series of Preferred Stock of Metabolix, Inc. classifying and designating the Series A Junior Participating Cumulative Preferred Stock.
4.1(1)	Specimen Stock Certificate for shares of the Registrant's Common Stock.
4.2(5)	Shareholder Rights Agreement, dated as of July 7, 2009, between Metabolix, Inc. and American Stock Transfer & Trust Company, LLC, as Rights Agent.
4.3(9)	Amendment No. 1 to Shareholder Rights Agreement, dated as of February 6, 2012, between the Company and American Stock Transfer & Trust Company, LLC, as Rights Agent.

Exhibit Number	Description
10.1†(1)	1995 Stock Plan.
10.1.1†(1)	1995 Stock Plan, Form of Incentive Stock Option Agreement.
10.1.2†(1)	1995 Stock Plan, Form of Non-Qualified Stock Option Agreement.
10.2†(1)	2005 Stock Plan.
10.2.1†(1)	2005 Stock Plan, Form of Incentive Stock Option Agreement.
10.2.2†(1)	2005 Stock Plan, Form of Non-Qualified Stock Option Agreement.
10.3†(1)	2006 Stock Option and Incentive Plan.
10.3.1†(1)	2006 Stock Option and Incentive Plan, Form of Incentive Stock Option Agreement.
10.3.2†(1)	2006 Stock Option and Incentive Plan, Form of Non-Qualified Stock Option Agreement.
10.3.3†(1)	2006 Stock Option and Incentive Plan, Form of Director Non-Qualified Stock Option Agreement.
10.4#(1)	License Agreement between the Registrant and Massachusetts Institute of Technology dated July 15, 1993, as amended.
10.5#(1)	Commercial Alliance Agreement by and among the Registrant, ADM/Metabolix Sales Company, LLC and ADM Polymer Corporation dated July 14, 2006.
10.6#(1)	Operating Agreement of ADM/Metabolix Sales Company, LLC by and between the Registrant and ADM Polymer Corporation dated July 14, 2006.
10.7(1)	Letter Agreement by and between the Registrant and Archer Daniels Midland Company dated November 3, 2004.
10.8#(11)	Joint Commercial Alliance Settlement Agreement dated March 6, 2012, among the Registrant, ADM Polymer Corporation, Telles, LLC, and Telles (Europe) BV.
10.9†(8)	Amended and Restated Employment Agreement between the Registrant and Richard P. Eno dated March 17, 2011.
10.10†(1)	Employment Agreement between the Registrant and Oliver P. Peoples dated July 20, 2006.
10.10.1†(7)	First Amendment to Employment Agreement between the Registrant and Oliver P. Peoples executed December 19, 2008.
10.10.2†(7)	Second Amendment to Employment Agreement between the Registrant and Oliver P. Peoples executed February 25, 2009.
10.11†(4)	Employment Agreement between the Registrant and Joseph D. Hill executed March 21, 2008.
10.11.1†(7)	First Amendment to Employment Agreement between the Registrant and Joseph D. Hill executed December 23, 2008.
10.12†(7)	Change of Control Severance Agreement between the Registrant and Sarah P. Cecil executed December 18, 2008.
10.13†(7)	Employment Agreement between the Registrant and Robert E. Engle executed December 19, 2008.

Exhibit Number	Description
10.14†(6)	Employment Agreement between the Registrant and Johan van Walsem executed July 9, 2009.
10.15†(10)	Employment Agreement between the Registrant and Lynne H. Brum executed November 14, 2011.
10.16†(12)	Employment Agreement between Registrant and Max Senechal executed May 1, 2012.
10.17†(1)	Form of Employee Noncompetition, Nondisclosure and Inventions Agreement with Oliver P. Peoples and Johan van Walsem.
10.18†(1)	Form of Noncompetition, Nondisclosure and Inventions Agreement between the Registrant Richard P. Eno, Joseph D. Hill, Robert E. Engle, Lynne Brum, Max Senechal and Sarah P. Cecil.
10.19†(1)	Form of Indemnification Agreement between the Registrant and its Directors and Officers.
10.20(1)	Lease Agreement between the Registrant and 21 Erie Realty Trust dated as of December 29, 2003 for the premises located at 21 Erie Street, Cambridge, Massachusetts 02139.
10.21(2)	Lease between Fortune Wakefield, LLC and Metabolix, Inc. dated March 30, 2007.
10.22(11)	First Amendment of Lease dated February 29, 2012, between Fortune Wakefield, LLC and Metabolix, Inc. dated March 30, 2007.
10.23#(1)	License Agreement between the Registrant and Tepha, Inc. dated as of October 1, 1999.
10.24#(1)	License Agreement between the Registrant and Tepha, Inc. dated as of September 9, 2003.
10.25#(3)	Exclusive License Agreement between the Registrant and Abbott Laboratories dated November 12, 2007.
10.26(9)	Letter Agreement, dated as of February 6, 2012, by and among the Company, Jack W. Schuler, Renate Schuler and the Schuler Family Foundation.
10.27*	Confidential Disclosure Agreement dated February 6, 2013, between the Company and Jack W. Schuler.
14.1(10)	Metabolix, Inc. Code of Business Conduct and Ethics.
21.1*	Subsidiaries of the Registrant.
23.1*	Consent of PricewaterhouseCoopers LLP, an independent registered public accounting firm.
24.1	Power of Attorney (incorporated by reference to the signature page of this Annual Report on Form 10-K).
31.1*	Certification Pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934.
31.2*	Certification Pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934.
32.1*	Certification Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

Exhibit Number	Description
101.1	The following financial information from the Metabolix Inc. Annual Report on Form 10-K for the year ended December 31, 2012 formatted in XBRL; (i) Consolidated Balance Sheets, December 31, 2012 and December 31, 2011; (ii) Consolidated Statements of Operations, Years Ended December 31, 2012, 2011 and 2010; (iii) Consolidated Statements of Comprehensive Income (Loss), Years Ended December 31, 2012, 2011 and 2010; (iv) Consolidated Statements of Cash Flows, Years Ended December 31, 2012, 2011 and 2010; and (v) Consolidated Statements of Stockholders' Equity for the Years Ended December 31, 2012, 2011 and 2010; and (vi) Notes to Consolidated Financial Statements.*
101.INS*	XBRL Instance Document.
101.SCH*	XBRL Taxonomy Extension Schema.
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase.
101.DEF*	XBRL Taxonomy Extension Definition Linkbase.
101.LAB*	XBRL Taxonomy Extension Label Linkbase.
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase.

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

†† As provided in Rule 406T of Regulation S-T, this information is furnished and not filed for purposes of Sections 11 and 12 of the Securities Act of 1933 and Section 18 of the Securities Exchange Act of 1934.

Confidential treatment has been granted for certain portions of this document pursuant to a Commission order. Such provisions have been filed separately with the Commission.

* Filed herewith

(1) Incorporated by reference herein to the exhibits to the Company's Registration Statement on Form S-1 (File No. 333-135760)

(2) Incorporated by reference herein to the exhibits to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2007 (File No. 001-33133)

(3) Incorporated by reference herein to the exhibits to the Company's 2007 Annual Report on Form 10-K filed March 13, 2008 (File No. 001-33133)

(4) Incorporated by reference herein to the exhibits to the Company's Report on Form 8-K filed March 24, 2008 (File No. 001-33133)

(5) Incorporated herein by reference to the exhibits to the Company's Registration Statement on Form 8-A on July 8, 2009 (File No. 001-33133)

(6) Incorporated by reference herein to the exhibits to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2009 (File No. 001-33133)

(7) Incorporated by reference herein to the exhibits to the Company's 2008 Annual Report on Form 10-K filed March 12, 2009 (File No. 001-33133)

(8) Incorporated by reference herein to the exhibits to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2011 (File No. 001-33133)

(9) Incorporated by reference herein to the exhibits to the Company's Report on Form 8-K filed February 10, 2012 (File No. 001-33133)

(10) Incorporated by reference herein to the exhibits to the Company's 2011 Annual Report on Form 10-K filed March 12, 2012

(11) Incorporated by reference herein to the exhibits to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2012 (File No. 001-33133)

(12) Incorporated by reference herein to the exhibits to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2012 (File No. 001-33133)

SIGNATURES

Pursuant to the requirements 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.

METABOLIX, INC.

March 28, 2013 By: /s/ RICHARD P. ENO

Richard P. Eno
President and Chief Executive Officer
(Principal Executive Officer)

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Richard P. Eno, Joseph D. Hill, and Sarah P. Cecil, jointly and severally, his or her attorney-in-fact, with the power of substitution, for him or her in any and all capacities, to sign any amendments to this Annual Report on Form 10-K and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his or her substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities 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.

Name	Title	Date
/s/ RICHARD P. ENO Richard P. Eno	President and Chief Executive Officer and Director (Principal Executive Officer)	March 27, 2013
/s/ JOSEPH D. HILL Joseph D. Hill	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	March 28, 2013
/s/ PETER N. KELLOGG Peter N. Kellogg	Director	March 28, 2013
/s/ JAY KOUBA Jay Kouba	Director	March 28, 2013
/s/ STEPHEN J. LARGE Stephen J. Large	Director	March 27, 2013

Name	Title	Date
/s/ CELESTE B. MASTIN		
Celeste B. Mastin	Director	March 27, 2013
/s/ OLIVER P. PEOPLES		
Oliver P. Peoples	Director	March 22, 2013
/s/ ANTHONY J. SINSKEY		
Anthony J. Sinskey, Sc.D.	Director	March 28, 2013
/s/ MATTHEW STROBECK		
Matthew Strobeck	Director	March 28, 2013
/s/ ROBERT L. VAN NOSTRAND		
Robert L. Van Nostrand	Director	March 28, 2013
/s/ BARBARA H. WELLS		
Barbara H. Wells	Director	March 24, 2013

METABOLIX, INC.
Index to Consolidated Financial Statements

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Metabolix, Inc.

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, comprehensive income (loss), stockholders' equity and cash flows present fairly, in all material respects, the financial position of Metabolix, Inc. and its subsidiaries at December 31, 2012 and 2011, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2012 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2012, based on criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Annual Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated 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 audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included 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, and evaluating the overall financial statement presentation. 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 audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts

March 28, 2013

METABOLIX, INC.

CONSOLIDATED BALANCE SHEETS

(In thousands, except share and per share amounts)

	December 31, 2012	December 31, 2011
Assets		
Current Assets:		
Cash and cash equivalents	$ 14,572	$ 21,277
Short-term investments	29,201	55,578
Accounts receivable	839	146
Due from related parties	75	311
Unbilled receivables	372	304
Prepaid expenses and other current assets	692	823
Inventory	3,204	—
Total current assets	48,955	78,439
Restricted cash	594	622
Property and equipment, net	1,358	2,276
Long-term investments	2,508	1,503
Other assets	95	72
Total assets	$ 53,510	$ 82,912
Liabilities and Stockholders' Equity		
Current Liabilities:		
Accounts payable	$ 1,233	$ 512
Accrued expenses	3,519	3,574
Current portion of deferred rent	165	165
Short-term deferred revenue	1,067	2,914
Total current liabilities	5,984	7,165
Deferred rent, net of current portion	55	221
Long-term deferred revenue	—	35,944
Other long-term liabilities	131	119
Total liabilities	6,170	43,449
Commitments and contingencies (Note 7)		
Stockholders' Equity:		
Preferred stock ($0.01 par value per share); 5,000,000 shares authorized; no shares issued or outstanding	—	—
Common stock ($0.01 par value per share); 100,000,000 shares authorized at December 31, 2012 and 2011, 34,306,570 and 34,115,798 shares issued and outstanding at December 31, 2012 and 2011, respectively	343	341
Additional paid-in capital	289,050	284,796
Accumulated other comprehensive loss	(21)	(12)
Accumulated deficit	(242,032)	(245,662)
Total stockholders' equity	47,340	39,463
Total liabilities and stockholders' equity	$ 53,510	$ 82,912

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

METABOLIX, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except share and per share amounts)

	Years Ended December 31,		
	2012	2011	2010
Revenue:			
Revenue from termination of ADM collaboration	$ 38,885	$ —	$ —
Grant revenue	1,971	918	64
Product revenue	1,211	—	—
License fee and royalty revenue from related parties	152	447	122
License fee revenue	97	60	50
Research and development revenue	—	—	212
Total revenue	42,316	1,425	448
Costs and expenses:			
Cost of product revenue	1,426	—	—
Research and development	23,177	24,445	23,673
Selling, general, and administrative	14,110	15,841	15,714
Total costs and expenses	38,713	40,286	39,387
Income (loss) from operations	3,603	(38,861)	(38,939)
Other income (expense):			
Interest income, net	27	76	136
Net income (loss)	$ 3,630	$ (38,785)	$ (38,803)
Net income (loss) per share:			
Basic	$ 0.11	$ (1.24)	$ (1.45)
Diluted	$ 0.11	$ (1.24)	$ (1.45)
Number of shares used in per share calculations:			
Basic	34,217,298	31,257,376	26,773,755
Diluted	34,279,779	31,257,376	26,773,755

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

METABOLIX, INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

(In thousands)

	Years Ended December 31,		
	2012	2011	2010
Net income (loss):			
Other comprehensive income (loss)	$ 3,630	$ (38,785)	$ (38,803)
Change in unrealized gain (loss) on investments	(3)	20	(28)
Change in foreign currency translation adjustment	(6)	(17)	(9)
Total other comprehensive income (loss)	(9)	3	(37)
Comprehensive income (loss)	$ 3,621	$ (38,782)	$ (38,840)

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

METABOLIX, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)

	Year Ended December 31,		
	2012	2011	2010
Cash flows from operating activities			
Net income (loss)	$ 3,630	$ (38,785)	$ (38,803)
Adjustments to reconcile net income (loss) to cash used in operating activities:			
Depreciation	1,298	1,507	1,647
Charge for 401(k) company common stock match	408	529	443
Stock-based compensation	3,807	4,633	4,696
Changes in operating assets and liabilities:			
Accounts receivable	(693)	(146)	19
Unbilled receivable	(68)	(296)	(5)
Due from related parties	236	(71)	(15)
Prepaid expenses and other assets	108	68	(104)
Inventory	(3,204)	—	—
Accounts payable	721	273	(387)
Accrued expenses	(34)	(623)	329
Deferred rent and other long-term liabilities	(154)	(153)	(156)
Deferred revenue	(37,791)	1,333	341
Net cash used in operating activities	(31,736)	(31,731)	(31,995)
Cash flows from investing activities			
Purchase of property and equipment	(392)	(895)	(906)
Proceeds from sale of equipment	12	—	—
Change in restricted cash	28	—	(29)
Purchase of investments	(58,933)	(107,477)	(83,814)
Proceeds from sale and maturity of short-term investments	84,303	99,464	116,126
Net cash provided by (used in) investing activities	25,018	(8,908)	31,377
Cash flows from financing activities			
Proceeds from options exercised	19	74	2,339
Proceeds from public stock offering, net of issuance costs	—	49,333	—
Net cash provided by financing activities	19	49,407	2,339
Effect of exchange rate changes on cash and cash equivalents	(6)	(17)	(9)
Net increase (decrease) in cash and cash equivalents	(6,705)	8,751	1,712
Cash and cash equivalents at beginning of period	21,277	12,526	10,814
Cash and cash equivalents at end of period	$ 14,572	$ 21,277	$ 12,526

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

METABOLIX, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(In thousands, except share amounts)

	Common Stock		Additional Paid-In Capital	Accumulated other Comprehensive Income (loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Par Value				
Balance, December 31, 2009	26,514,076	$ 265	$ 222,831	$ 22	$ (168,074)	$ 55,044
Exercise of common stock options	346,162	4	2,335	—	—	2,339
Non-cash stock-based compensation expense	—		4,696	—	—	4,696
Issuance of common stock for 401k match	35,151	—	437	—	—	437
Change in unrealized gain on investments	—	—	—	(28)	—	(28)
Effect of foreign currency translation	—	—	—	(9)	—	(9)
Net loss	—	—	—	—	(38,803)	(38,803)
Balance, December 31, 2010	26,895,389	$ 269	$ 230,299	$ (15)	$ (206,877)	$ 23,676
Exercise of common stock options	21,851	—	74	—	—	74
Non-cash stock-based compensation expense	—	—	4,633	—	—	4,633
Issuance of common stock for 401k match	68,558	1	528	—	—	529
Issuance of common stock upon public offering, net of offering costs of $2,360	7,130,000	71	49,262	—	—	49,333
Change in unrealized loss on investments	—	—	—	20	—	20
Effect of foreign currency translation	—	—	—	(17)	—	(17)
Net loss	—	—	—	—	(38,785)	(38,785)
Balance, December 31, 2011	34,115,798	$ 341	$ 284,796	$ (12)	$ (245,662)	$ 39,463
Exercise of common stock options	11,436	—	19	—	—	19
Non-cash stock-based compensation expense	—	—	3,807	—	—	3,807
Issuance of common stock for 401k match	179,336	2	428	—	—	430
Change in unrealized loss on investments	—	—	—	(3)	—	(3)
Effect of foreign currency translation	—	—	—	(6)	—	(6)
Net income	—	—	—	—	3,630	3,630
Balance, December 31, 2012	34,306,570	$ 343	$ 289,050	$ (21)	$ (242,032)	$ 47,340

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

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(In thousands, except for share and per share amounts)

1. Nature of Business

Metabolix, Inc. (the "Company") is an innovation-driven bioscience company which is focused on bringing environmentally friendly solutions to the plastics, chemicals and energy industries. The Company has core capabilities in microbial genetics, fermentation process engineering, chemical engineering, polymer science, plant genetics and botanical science, and has assembled these capabilities in a way that has allowed the integration of biotechnology with chemical engineering and industrial practice. The Company is subject to risks common to companies in the biotechnology industry including, but not limited to, development by the Company's competitors of new technological innovations, dependence on key personnel, protection of proprietary technology, the need to obtain additional funding, and compliance with government regulations.

The Company held unrestricted cash, cash equivalents and investments of $46,281 at December 31, 2012. The Company believes that these resources and the cash to be generated from existing grants and expected product sales will be sufficient to meet its projected operating requirements for at least the next twelve months. The Company continues to face significant challenges and uncertainties and, as a result, the Company's available capital resources may be consumed more rapidly than currently expected due to (a) lower than expected sales of the Company's new biopolymer products as a result of slow market adoption; (b) increases in costs related to the start-up and operation of commercial manufacturing operations with third parties; (c) changes the Company may make to the business that affect ongoing operating expenses; (d) changes the Company may make in its business strategy; (e) changes in the Company's research and development spending plans; and (f) other items affecting the Company's forecasted level of expenditures and use of cash resources. Accordingly, the Company will need to raise additional funds to support its operating and capital needs. The Company may attempt to obtain additional funding through public or private financing, collaborative arrangements with strategic partners, or through additional credit lines or other debt financing sources to increase the funds available to fund operations. However, the Company may not be able to secure such financing in a timely manner and on favorable terms, if at all. Furthermore, if the Company issues equity or debt securities to raise additional funds, its existing stockholders may experience dilution, and the new equity or debt securities may have rights, preferences and privileges senior to those of its existing stockholders. If the Company raises additional funds through collaboration, licensing or other similar arrangements, it may be necessary to relinquish valuable rights to its potential products or proprietary technologies, or grant licenses on terms that are not favorable to the Company. Without additional funds, the Company may be forced to delay, scale back or eliminate some of its sales and marketing efforts, research and development activities, or other operations and potentially delay product development in an effort to provide sufficient funds to continue its operations. If any of these events occurs, the Company's ability to achieve its development and commercialization goals would be adversely affected.

2. Summary of Significant Accounting Policies

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All significant intercompany transactions were eliminated. Telles, the Company's former joint venture with Archer Daniels Midland Company ("ADM"), was not consolidated by the Company.

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(In thousands, except for share and per share amounts)

2. Summary of Significant Accounting Policies (Continued)

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America ("GAAP") requires management 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 the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with an original maturity date of ninety days or less at the date of purchase to be cash equivalents.

Investments

The Company considers all highly liquid investments purchased with an original maturity date of ninety days or less at the date of purchase to be cash equivalents, and all investments purchased with an original maturity date of ninety days or more at the date of purchase and a maturity date of one year or less at the balance sheet date to be short-term investments. All other investments are classified as long-term. At December 31, 2012, investments consisted of U.S. Treasury securities and debt securities of the U.S. government. At December 31, 2011, investments consisted of corporate debt and debt securities of the United States government. All investments were classified as available for sale as of December 31, 2012 and 2011. See Note 4 for further discussion on investments.

Unrealized gains and temporary losses on investments are included in accumulated other comprehensive income (loss) as a separate component of stockholders' equity. Realized gains and losses, dividends, interest income and declines in value judged to be other-than-temporary credit losses are included in other income (expense). Any premium or discount arising at purchase is amortized and/or accreted to interest income.

Restricted Cash

The Company had restricted cash in the amount of $594 and $622 at December 31, 2012 and 2011, respectively. At December 31, 2012 restricted cash consisted of $494 held in connection with the lease agreement for the Company's Cambridge, Massachusetts facility and $100 held in connection with the Company's corporate credit card program. At December 31, 2011 restricted cash consisted of $522 held in connection with two lease agreements for facilities located in Cambridge, Massachusetts and $100 held in connection with the Company's corporate credit card program.

Foreign Currency Translation

Foreign denominated assets and liabilities of Metabolix Oilseeds, Inc., the Company's wholly-owned Canadian subsidiary, are translated into U.S. dollars at the prevailing exchange rates in effect on the balance sheet date. Revenues and expenses are translated at average exchange rates prevailing during the period. Any resulting translation gains or losses are recorded in the accumulated other comprehensive income (loss) in the consolidated balance sheet.

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(In thousands, except for share and per share amounts)

2. Summary of Significant Accounting Policies (Continued)

Comprehensive Income (Loss)

Comprehensive income (loss) is comprised of net income (loss) and certain changes in stockholders' equity that are excluded from net income (loss). The Company includes unrealized gains and losses on marketable securities and foreign currency translation adjustments in other comprehensive income (loss).

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk primarily consist of cash and cash equivalents and short-term investments. The Company primarily invests its excess cash and cash equivalents in money market funds, corporate debt, federal agency notes and U.S. treasury notes. Investments are acquired in accordance with the Company's investment policy which establishes a concentration limit per issuer.

The Company provides credit to customers in the normal course of business. The Company performs ongoing credit evaluations of its customers' financial condition and limits the amount of credit extended when deemed necessary. At December 31, 2012, the Company's accounts and unbilled receivables include $561 or 46% from U.S. and Canadian government grants and $535 or 44% from customer product sales. At December 31, 2012, one customer represented 41% of accounts receivable due from product sales.

Fair Value Measurements

The carrying amounts of the Company's financial instruments as of December 31, 2012 and 2011, which include cash equivalents, investments, accounts receivable, unbilled receivables, due from related parties, accounts payable, and accrued expenses, approximate their fair values due to the short-term nature of these instruments. See Note 15 for further discussion on fair value measurements.

Segment Information

The accounting guidance for segment reporting establishes standards for reporting information on operating segments in annual financial statements. The Company operates in one segment, which is the business of developing and commercializing technologies for the production of polymers and chemicals in plants and in microbes. The Company's chief operating decision-maker does not manage any part of the Company separately, and the allocation of resources and assessment of performance are based on the Company's consolidated operating results. As of December 31, 2012 and 2011 less than 10% of the Company's combined total assets were located outside of the United States. In addition, the reported net income (loss) outside of the United States was less than 10% of the combined net income (loss) of the consolidated Company.

Inventory

During March 2012, the Company acquired raw material and finished goods inventory of biopolymer from Telles, LLC as described in Note 17. The Company's adopted inventory policies as a result of this transaction are to state inventory at the lower of cost or market and to value inventory using the average cost method. The Company analyzes its inventory levels quarterly and writes down, to

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(In thousands, except for share and per share amounts)

2. Summary of Significant Accounting Policies (Continued)

cost of product revenue, inventory that has become obsolete, inventory in excess of expected sales requirements or inventory that fails to meet commercial sales specifications.

Property and Equipment

Property and equipment are stated at cost less accumulated depreciation. Repairs and maintenance are charged to operations as incurred. Gains and losses on the disposition of equipment are recorded in net income or loss and the related cost and accumulated depreciation are removed from the respective accounts. Depreciation is computed using the straight-line method over the estimated useful lives as follows:

Asset Description	Estimated Useful Life
Equipment	2.5 - 3 years
Furniture and Fixtures	5
Software	3
Leasehold improvements	Shorter of useful life or term of lease

The Company accounts for operating lease incentive payments received from a lessor in accordance with the accounting standard on accounting for leases. The Company records landlord incentive payments received as deferred rent and amortizes these amounts as reductions to lease expense over the lease term.

Impairment of Long-Lived Assets

The Company accounts for the impairment and disposal of long-lived assets in accordance with accounting guidance on accounting for the impairment or disposal of long-lived assets. The guidance requires that long-lived assets, such as property and equipment be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. The guidance further requires that companies recognize an impairment loss only if the carrying amount of a long-lived asset is not recoverable based on its undiscounted future cash flows and measure an impairment loss as the difference between the carrying amount and fair value of the asset.

Revenue Recognition

The Company recognizes revenue in accordance with accounting standards on revenue recognition. Principal sources of revenue are government research grants, product sales, license fees, royalty revenues and research and development payments that are primarily derived from collaborative agreements with other companies.

During March 2012, the Company initiated biopolymer product sales to customers for the first time. The Company's policy is to recognize revenue when evidence of an arrangement exists, title has passed or services have been rendered, the selling price is fixed or determinable and collectability is reasonably assured. Revenue from product sales to customers is recognized when all elements of the sale have been delivered. During the Company's six months ended June 30, 2012, it did not provide for rights of return to customers on product sales, except for situations where the product did not meet

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(In thousands, except for share and per share amounts)

2. Summary of Significant Accounting Policies (Continued)

technical specifications. The Company modified its product return policy prospectively during its fiscal quarter ending September 30, 2012 to allow discretion in accepting returns during a period of sixty days after product delivery. Until sufficient experience is developed on which to base an estimate of product returns, the Company defers recognition of product revenue and related costs until the later of the sixty day period or the customer payment has been received. As of December 31, 2012, the Company deferred product revenue and associated cost of product revenue of $786 and $219, respectively, under this policy.

Fees to license the Company's proprietary and licensed technologies are recognized only after both the license period has commenced and the technology has been delivered. Royalty revenue is recognized when it becomes determinable and collectability is reasonably assured; otherwise the Company recognizes royalty revenue upon receipt of payment.

The Company follows authoritative guidance on revenue recognition for multiple-element arrangements entered into or materially modified on or after January 1, 2011. The guidance amends the criteria for separating and allocating consideration in a multiple-element arrangement by modifying the fair value requirements for revenue recognition and eliminating the use of the residual method. The fair value of deliverables under the arrangement may be derived using a "best estimate of selling price" if vendor-specific objective evidence and third-party evidence is not available. Deliverables under the arrangement will be separate units of accounting, provided (i) a delivered item has value to the customer on a standalone basis; and (ii) if the arrangement includes a general right of return relative to the delivered item, delivery or performance of the undelivered item is considered probable and substantially within the Company's control.

The Company recognizes funds received from contractual research services and development services and from government grants as revenue. These contracts and grants are considered an ongoing major and central operation of the Company's business. For government grants, revenue is earned as research expenses related to the grants are incurred.

Research and Development Expenses

All costs associated with internal research and development as well as research and development services conducted for others are expensed as incurred. Research and development expenses include direct costs for salaries, employee benefits, subcontractors, facility related expenses, depreciation and stock-based compensation related to employees and non-employees involved in the Company's research and development. Costs related to revenue-producing grants are also recorded as research and development expenses. Prior to the termination of the Telles joint venture in February 2012, the Company's portion of the costs incurred by ADM relating to the pre-commercial manufacturing of Mirel were netted against amounts due from ADM and recorded as due from related party on the Company's balance sheets.

In 2012, the Company entered into an arrangement with Antibioticos S.A. for demonstration production of biopolymers at the Antibioticos facility in Leon, Spain, with the intention, upon successful completion of the demonstration phase, to enter into a commercial manufacturing agreement under which Antibioticos would provide toll manufacturing of our PHA biopolymers. During 2012, the Company made payments of $2,258 to Antibioticos for facility improvements, manufacturing equipment

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(In thousands, except for share and per share amounts)

2. Summary of Significant Accounting Policies (Continued)

and for raw materials related to the demonstration production. These costs were recorded as research and development expense since it is not certain that these costs will have a future benefit to the Company beyond the current demonstration agreement. Costs associated with future manufacturing demonstration batches of PHA biopolymers will be recorded as research and development expense until the product produced meets commercial specifications when it will be capitalized as saleable inventory.

Selling, General, and Administrative Expenses

The Company's selling, general and administrative expense line item includes costs for salaries, employee benefits, facilities expenses, consulting fees, travel expenses, depreciation expenses, and office related expenses incurred to support the selling and administrative operations of the Company.

Intellectual Property Costs

The Company includes all costs associated with the prosecution and maintenance of patents within selling, general and administrative expenses in the consolidated statement of operations.

Stock-Based Compensation

The Company accounts for stock-based compensation costs in accordance with the accounting standards for stock-based compensation, which require that all share-based payments to employees be recognized in the statement of operations based on their fair values. Compensation cost is based on the grant-date fair value of the award, adjusted for estimated forfeitures, and is recognized on a straight-line basis over the period during which an employee is required to provide service in exchange for the award. See Note 12 for a description of the types of stock-based awards granted, the compensation expense related to such awards and detail of equity-based awards outstanding.

Basic and Diluted Net Loss per Share

Basic net income (loss) per share is computed by dividing net income (loss) by the weighted-average number of common shares outstanding. Common stock equivalents include stock options and warrants. Diluted net loss per share is computed by dividing net income by the weighted-average number of dilutive common shares outstanding during the period. Diluted shares outstanding is calculated by adding to the weighted shares outstanding any potential (unissued) shares of common stock from outstanding stock options and warrants based on the treasury stock method. In periods when a net loss is reported, all common stock equivalents are excluded from the calculation because they would have an anti-dilutive effect, meaning the loss per share would be reduced. Therefore, in periods when a loss is reported there is no difference in basic and dilutive loss per share.

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(In thousands, except for share and per share amounts)

2. Summary of Significant Accounting Policies (Continued)

Shares used to calculate diluted earnings per share for the three years ended December 31, 2012, 2011 and 2010, respectively, are shown below:

	Year Ended December 31,		
	2012	2011	2010
Numerator:			
Net income (loss)	$ 3,630	$ (38,785)	$ (38,803)
Denominator:			
Weighted average number of common shares outstanding	34,217,298	31,257,376	26,773,755
Effect of dilutive securities:			
Stock options	62,481	—	—
Dilutive potential common shares	62,481	—	—
Shares used in calculating diluted earnings per share	34,279,779	31,257,376	26,773,755

The number of shares of potentially dilutive common stock related to options and warrants that were excluded from the calculation of dilutive shares since the inclusion of such shares would be anti-dilutive for the years ended December 31, 2012, 2011 and 2010, respectively, are shown below:

	Year ended December 31,		
	2012	2011	2010
Options	5,579,042	3,858,685	3,246,079
Warrants	4,086	4,086	4,086
Total	5,583,128	3,862,771	3,250,165

Income Taxes

The Company follows the accounting guidance on accounting for income taxes which requires recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements or tax returns. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. A valuation allowance is provided to reduce the deferred tax asset to a level which, more likely than not, will be realized. See Note 13 for further discussion of income taxes.

Recent Accounting Standards Changes

In June 2011, the Financial Accounting Standards Board ("FASB") issued an accounting standards update that eliminates the option to present components of other comprehensive income as part of the statement of changes in equity and requires an entity to present items of net income and other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements. This guidance also requires an entity to present on the face of the financial statements reclassification adjustments from other comprehensive income to net income. This guidance became effective for fiscal years beginning after December 15, 2011. In December 2011, the

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(In thousands, except for share and per share amounts)

2. Summary of Significant Accounting Policies (Continued)

FASB issued an accounting standards update that defers the presentation requirement for other comprehensive income reclassifications on the face of the financial statements. The Company adopted the provisions of the guidance in its first quarter of 2012 and elected to present items of net income and other comprehensive income in two separate but consecutive statements.

3. Significant Collaborations

The Company follows the accounting guidance for collaborative arrangements which require that certain transactions between collaborators be recorded in the income statement on either a gross or net basis, depending on the characteristics of the collaboration relationship, and provides for enhanced disclosure of collaborative relationships. The Company evaluates its collaborative agreements for proper income statement classification based on the nature of the underlying activity. If payments to and from collaborative partners are not within the scope of other authoritative accounting literature, the income statement classification for the payments is based on a reasonable, rational analogy to authoritative accounting literature that is applied in a consistent manner. During the three years ended December 31, 2012, the Company had one significant collaboration arrangement with Archer Daniels Midland Company whereby the Company received payments and applied revenue recognition accounting guidance to the payments received and recorded corresponding costs as operating expenses.

We are not currently participating in any collaborative arrangements. Our historical strategy for collaborative arrangements has been to retain substantial participation in the future economic value of our technology while receiving current cash payments to offset research and development costs and working capital needs. By their nature, our collaborative agreements have been complex, containing multiple elements covering a variety of present and future activities.

ADM Collaboration

From 2004 through 2011, the Company developed and began commercialization of its PHA biopolymers through a technology alliance and subsequent commercial alliance with ADM Polymer Corporation, a wholly-owned subsidiary of ADM, one of the largest agricultural processors in the world. The Commercial Alliance Agreement between Metabolix and ADM Polymer specified the terms and structure of the alliance. The agreement governed the activities and obligations of the parties to commercialize PHA biopolymers, which have been marketed under the brand names Mirel™ and Mvera™. These activities included the establishment of a joint venture company, Telles, LLC ("Telles"), to market and sell PHA biopolymers, the construction of a manufacturing facility capable of producing 110 million pounds of material annually (the "Commercial Manufacturing Facility"), the licensing of technology to Telles and to ADM, and the conducting of various research, development, manufacturing, sales and marketing, compounding and administrative services by the parties.

Telles was formed to: (i) serve as the commercial entity to establish and develop the commercial market for PHA biopolymers, and conduct the marketing and sales in accordance with the goals of the commercial alliance, (ii) assist in the coordination and integration of the manufacturing, compounding and marketing activities, and (iii) administer and account for financial matters on behalf of the parties. Metabolix and ADM each had a 50% ownership and voting interest in Telles.

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(In thousands, except for share and per share amounts)

3. Significant Collaborations (Continued)

Under the Commercial Alliance Agreement ADM was permitted, under limited circumstances, to terminate the alliance if a change in circumstances that was not reasonably within the control of ADM made the anticipated financial return from the project inadequate or too uncertain. The agreement provided that, upon termination by ADM due to a change in circumstances, Metabolix would be permitted to continue to produce and sell PHA biopolymers, and ADM would be required to perform manufacturing services for the Company for a period of time following the termination (subject to certain payment obligations to ADM). On January 9, 2012, ADM notified Metabolix that it was terminating the commercial alliance effective February 8, 2012. ADM had undertaken a strategic review of its business investments and activities and made the decision to focus resources outside of Telles. As the basis for the decision, ADM indicated to the Company that the projected financial returns from the alliance were too uncertain.

The Commercial Alliance Agreement with ADM limited the rights of both ADM and Metabolix to work with other parties or alone in developing or commercializing certain PHAs produced through fermentation. These exclusivity obligations ended upon termination of the alliance. Also, upon termination of the alliance, Metabolix intellectual property licenses to ADM Polymer and Telles ended, with Metabolix retaining all rights to its intellectual property. ADM retained its Commercial Manufacturing Facility located in Clinton, Iowa, previously used to produce PHA biopolymers for Telles.

Under the Technology Alliance and Option Agreement and Commercial Alliance Agreement, various payments were made to Metabolix by ADM as shown in the table below. All of these payments were recorded as deferred revenue on the Company's balance sheet and were expected to be recognized on a straight line basis over a period of approximately ten years in which Metabolix would fulfill its contractual obligations during the Commercial Phase of the Commercial Alliance Agreement.

Upfront payment	$ 3,000
Milestone payments	2,000
Support payments	22,050
Cost sharing payments for pre-commercial manufacturing plant construction and operations	11,835
Total	$ 38,885

The Company had no further performance obligations in connection with the commercial alliance after its termination, and as a result, the entire $38,885 of deferred revenue was recognized by the Company during its fiscal quarter ended March 31, 2012.

After termination of the Commercial Alliance Agreement, the parties entered into a Settlement Agreement in which the parties agreed to specific terms related to the winding up and dissolution of Telles. Under this Settlement Agreement, Metabolix purchased certain assets of the joint venture for $2,982 including Telles's entire inventory, exclusive and perpetual rights to all of Telles's trademarks, and all product registrations, certifications and approvals for Telles's PHA biopolymers. Pursuant to the Settlement Agreement, ADM relinquished any claims with respect to certain co-funded equipment previously acquired by Metabolix and situated at locations other than the Clinton, Iowa Commercial

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(In thousands, except for share and per share amounts)

3. Significant Collaborations (Continued)

Manufacturing Facility, and Metabolix and Telles waived any rights to post-termination manufacturing and fermentation services under the Commercial Alliance Agreement.

Pursuant to the Settlement Agreement, Telles paid to ADM an amount equal to the aggregate cash balances of Telles totaling $3,778 on the date of the Settlement Agreement, minus $100 retained by Telles to settle any remaining trade obligations. The remaining trade obligations of Telles at the date of execution of the Settlement Agreement did not exceed $100. In the event that ADM is required to repay to Telles or to pay to any creditor of Telles any amounts included in the $2,982 purchase price or the $3,678 distributed to ADM by Telles pursuant to the Settlement Agreement, Metabolix is obligated to reimburse ADM in an amount equal to 50% of such payments, provided that in no event would the amount to be so paid by Metabolix exceed the total of the $2,982 purchase price and the $3,678 Telles cash required to be so repaid or reimbursed by ADM. In February 2013, ADM notified the Company that Telles had been formally dissolved and that no third party creditor trade obligations had been paid. As a result, the Company believes that it is no longer contingently liable for any third party obligations stemming from its former ADM collaboration.

4. Investments

Investments consist of the following:

	Amortized Cost	Unrealized Gain	Unrealized (Loss)	Market Value
December 31, 2012				
Short-term investments				
Government sponsored enterprises	$ 29,189	$ 12	$ —	$ 29,201
Long-term investments				
Government-sponsored enterprises	2,507	1	—	2,508
Total	$ 31,696	$ 13	$ —	$ 31,709
December 31, 2011				
Short-term investments				
Corporate debt	$ 29,854	$ 13	$ (1)	$ 29,866
Government-sponsored enterprises	25,709	5	(2)	25,712
Long-term investments				
Government-sponsored enterprises	1,503	—	—	1,503
Total	$ 57,066	$ 18	$ (3)	$ 57,081

The average maturity of our marketable securities available-for-sale as of December 31, 2012 and 2011 was four and seven months, respectively.

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(In thousands, except for share and per share amounts)

5. Property and Equipment

Property and equipment consisted of the following:

	Year ended December 31,	
	2012	2011
Equipment	$ 5,151	$ 5,054
Furniture and fixtures	227	232
Leasehold improvements	2,641	2,565
Software	381	349
Total property and equipment, at cost	8,400	8,200
Less: Accumulated depreciation	(7,042)	(5,924)
Property and equipment, net	$ 1,358	$ 2,276

Depreciation expense for the years ended December 31, 2012, 2011, and 2010 was $1,298, $1,507 and $1,647 respectively. The Company had no equipment under capital leases as of December 31, 2012 or 2011.

6. Accrued Expenses

Accrued expenses consist of the following:

	Year ended December 31,	
	2012	2011
Employee compensation and benefits	$ 2,379	$ 1,740
Professional services	301	185
Intellectual property	105	240
Other	734	1,409
Total accrued expenses	$ 3,519	$ 3,574

7. Commitments and Contingencies

Leases

The Company rents its facilities under operating leases, which expire through May 2014. Rental payments under operating leases for the years ended December 31, 2012, 2011 and 2010 were $1,814, $1,808 and $1,674, respectively. The deferred rent liability recorded on the Company's balance sheet at December 31, 2012 and 2011 includes the unamortized balance of the landlord incentive payments and the cumulative difference between actual facility lease payments and lease expense recognized ratably

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(In thousands, except for share and per share amounts)

7. Commitments and Contingencies (Continued)

over the operating lease period. At December 31, 2012, the Company's future minimum payments required under operating leases are as follows:

Year ended December 31,	Minimum lease payment
2013	$ 1,744
2014	550
2015	—
2016	—
2017 and thereafter	—
Total	$ 2,294

Litigation

On February 17, 2012, a purported shareholder class action, Hilary Coyne v. Metabolix, Inc., Richard P. Eno, and Joseph Hill, Civil Action 1:12-cv-10318 (the "class action"), was filed in the United States District Court for the District of Massachusetts, naming the Company and certain officers of the Company as defendants. The class action alleges that the Company made material misrepresentations and/or omissions of material fact in the Company's disclosures during the period from March 10, 2010 through its January 12, 2012 press release announcing that ADM had given notice of termination of the Telles joint venture for PHA biopolymers, all in violation of Sections 10(b) and 20(a) of the Securities Exchange Act and Rule 10b-5. The class action seeks certification as a class action, compensatory damages in an unspecified amount, plaintiff's costs and attorneys' fees, and unspecified equitable or injunctive relief. The plaintiff filed an amended complaint on October 15, 2012 that supersedes the initial complaint and demands identical relief based on substantially similar allegations. On December 14, 2012, the defendants filed a motion to dismiss the amended complaint, which plaintiffs opposed, and on which the court has not yet ruled.

On March 7, 2012, a purported derivative lawsuit, Childs v. Kouba et al., Civil Action 12-0892 (the "derivative action"), was filed in Massachusetts Superior Court for Middlesex County, on behalf of the Company against members of the Company's Board of Directors for alleged breaches of their fiduciary duties and based on a nearly identical set of alleged facts as those asserted in the class action. The derivative action seeks compensatory damages in an unspecified amount, plaintiff's costs and attorneys' fees, and unspecified equitable or injunctive relief. The parties in the derivative action filed and the court granted a joint motion to stay the derivative action until after resolution of the anticipated motion to dismiss in the class action.

We are currently unable to assess the probability of loss or estimate a range of potential loss, if any, associated with these matters because they are at an early stage.

8. Related Party Transactions

Tepha Inc.

During 1999 and 2003, the Company entered into sublicense agreements with Tepha Inc. ("Tepha"), to sublicense technology to Tepha. The Company's directors, Matthew Strobeck and

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(In thousands, except for share and per share amounts)

8. Related Party Transactions (Continued)

Anthony J. Sinskey, serve on the Board of Directors of Tepha. The agreements with Tepha contain provisions for sublicense maintenance fees to be paid to the Company upon Tepha achieving certain financing milestones and for product related milestones. Under the agreement, the Company also receives royalties on net sales of licensed products and sublicensing revenues received by Tepha, subject to a minimum payment each year.

The Company engaged in various transactions with Tepha, and recognized license and royalty revenues of $149, $444 and $122, from Tepha for the years ended December 31, 2012, 2011, and 2010, respectively. The Company had outstanding receivable balances of $75 at December 31, 2012. There were no Tepha receivable balances at December 31, 2011.

ADM

The Company's former collaborative partner ADM made a $5,000 investment in the Company as part of the redeemable convertible preferred stock issuance in January 2006. Concurrent with the Company's initial public offering, ADM purchased 535,714 shares of the Company's stock in a private placement. ADM made various payments to the Company under the collaborative agreements signed during 2004 and 2006. See Note 3 for further discussion regarding collaborative agreements with ADM. The Company had an outstanding receivable balance of $203 due from ADM at December 31, 2011, which was recorded as due from related parties on the consolidated balance sheet. No receivables remain outstanding with ADM at December 31, 2012.

Telles

Telles was a limited liability company, formed and equally owned by the Company and ADM, which was intended to: (i) serve as the commercial entity to establish and develop the commercial market for Mirel, and conduct the marketing and sales in accordance with the goals of the commercial alliance, (ii) assist in the coordination and integration of the manufacturing, compounding and marketing activities, and (iii) administer and account for financial matters on behalf of the parties. The Company and ADM each had 50% ownership and voting interest in Telles. The Company had an outstanding receivable of $108 due from Telles at December 31, 2011. No receivables remain outstanding with Telles at December 31, 2012. The Company recognized license and royalty revenue of $3 for the year ended December 31, 2011. No license and royalty revenue from Telles was recognized in either 2010 or 2012.

Telles was formally dissolved in February 2013.

9. Preferred Stock

The Company's certificate of incorporation, as amended and restated, authorizes it to issue up to 5,000,000 shares of $0.01 par value preferred stock. As of December 31, 2012 and 2011, no preferred stock was issued or outstanding.

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(In thousands, except for share and per share amounts)

10. Common Stock

Common Stock Issuances

During May 2011, the Company completed a public offering of 7,130,000 shares of its common stock at a price of $7.25 per share. Net proceeds were $49,333 after deducting underwriting discounts, commissions and offering costs of $2,360. The Company intends to use the proceeds from the offering for working capital and other general corporate purposes.

Warrants

In connection with signing a lease agreement in 2004, the Company issued the landlord warrants to purchase 4,086 shares of common stock at an exercise price of $3.30 per share. The warrants expire ten years from the lease term commencement date. The fair value of these warrants is immaterial. At December 31, 2012, these warrants were all outstanding and exercisable.

11. Shareholder Rights Plan

On July 7, 2009, the Company adopted a Shareholder Rights Plan, the purpose of which is, among other things, to enhance the Board's ability to protect shareholder interests and to ensure that shareholders receive fair treatment in the event any coercive takeover attempt of the Company is made in the future. The Shareholder Rights Plan could make it more difficult for a third party to acquire, or could discourage a third party from acquiring, the Company or a large block of the Company's common stock.

In connection with the adoption of the Shareholder Rights Plan, the Board of Directors of the Company declared a dividend distribution of one preferred stock purchase right (a "Right") for each outstanding share of common stock to shareholders of record as of the close of business on July 8, 2009. The Rights currently are not exercisable and are attached to and trade with the outstanding shares of common stock. Under the Shareholder Rights Plan, the Rights become exercisable if a person becomes an "acquiring person" by acquiring 15% or more of the outstanding shares of common stock or if a person commences a tender offer that would result in that person owning 15% or more of the common stock. If a person becomes an "acquiring person," each holder of a Right (other than the acquiring person) would be entitled to purchase, at the then-current exercise price, such number of shares of the Company's preferred stock which are equivalent to shares of common stock having twice the exercise price of the Right. If the Company is acquired in a merger or other business combination transaction after any such event, each holder of a Right would then be entitled to purchase, at the then-current exercise price, shares of the acquiring company's common stock having a value of twice the exercise price of the Right.

On February 6, 2012, the Company entered into a letter agreement (the "Schuler Agreement") with Jack W. Schuler, Renate Schuler and the Schuler Family Foundation, a tax-exempt private operating foundation of which Jack W. Schuler and Renate Schuler serve as two of the three directors (collectively, the "Schuler Stockholders"). The Schuler Stockholders may be deemed to have aggregate beneficial ownership of up to 5,091,295 shares, or approximately 14.9%, of the Company's outstanding common stock, par value $0.01 per share (the "common stock").

Pursuant to the Schuler Agreement, the Schuler Stockholders have made certain representations and covenants regarding ownership, voting support arrangements, standstill arrangements and rights of

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(In thousands, except for share and per share amounts)

11. Shareholder Rights Plan (Continued)

first refusal. In exchange for these representations and covenants, the Company agreed to amend the Shareholder Rights Plan to allow the Schuler Stockholders, under certain circumstances, to increase their beneficial ownership up to 19.99% of the outstanding common stock without becoming Acquiring Persons (as defined in the Rights Agreement).

On February 6, 2012, contemporaneously with the execution of the Schuler Agreement, the Company amended the Shareholder Rights Plan to provide that, generally, so long as the Schuler Stockholders and their respective affiliates and associates do not at any time have Control Intent (as defined in the Shareholder Rights Plan), they may acquire additional shares of common stock without becoming acquiring persons under the Rights Plan, provided that their collective beneficial ownership does not at any time equal or exceed 20% of the then outstanding shares of common stock.

12. Stock-Based Compensation

The Company adopted a stock plan in 1995 (the "1995 Plan"), which provided for the granting of incentive stock options, nonqualified stock options, stock awards, and opportunities to make direct purchases of stock, to employees, officers, directors and consultants of the Company. In June 2005, the 1995 Plan was terminated and the Company adopted a new plan (the "2005 Plan"). No further grants or awards were subsequently made under the 1995 Plan. A total of 907,679 options were awarded from the 1995 Plan, and as of December 31, 2012, 86,619 of these options remain outstanding and eligible for future exercise and continue to be governed by the terms of the 1995 Plan.

The 2005 Plan provided for the granting of incentive stock options, nonqualified stock options, stock awards, and opportunities to make direct purchases of stock, to employees, officers, directors and consultants of the Company. In November 2006, the 2005 Plan was terminated and the Company adopted a new plan (the "2006 Plan"). No further grants or awards were subsequently made under the 2005 Plan. A total of 1,619,134 options were awarded from the 2005 Plan, and as of December 31, 2012, 250,046 of these options remain outstanding and eligible for future exercise and continue to be governed by the terms of the 2005 Plan.

The 2006 Plan provides for the granting of incentive stock options, nonqualified stock options, stock appreciation rights, deferred stock awards, restricted stock awards, unrestricted stock awards, cash-based awards and dividend equivalent rights. The 2006 Plan states that not more than 10,000,000 shares shall be issued under the plan. A total of 7,022,912 options have been awarded from the 2006 Plan and as of December 31, 2012, 5,242,377 of these options remain outstanding and eligible for future exercise.

Options granted under the Plans generally vest ratably over periods of two to four years from the date of hire for new employees, or date of award for existing employees, or date of commencement of services with the Company for nonemployees, and generally expire ten years from the date of issuance. The Company's policy is to issue new shares upon the exercise of stock options.

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(In thousands, except for share and per share amounts)

12. Stock-Based Compensation (Continued)

A summary of the activity related to the shares of common stock covered by outstanding options follows:

	Number of Shares	Weighted Average Exercise Price	Remaining Contractual Term (in years)	Aggregate Intrinsic value
Balance at December 31, 2011	3,858,685	$ 10.36		
Granted	2,529,700	2.14		
Exercised	(11,436)	1.65		
Cancelled	(797,907)	10.20		
Balance at December 31, 2012	5,579,042	6.68	7.38	$ —
Vested and expected to vest at December 31, 2012	5,349,779	6.83	7.31	—
Exerciseable at December 31, 2012	2,954,377	9.41	5.89	—

The weighted average grant date fair value per share of options granted during fiscal years 2012, 2011, and 2010 was $1.46, $5.02 and $8.08, respectively. The total intrinsic value of options exercised was $15, $81 and $2,439 for the years ended December 31, 2012, 2011 and 2010, respectively.

A summary of information about the shares of common stock covered by outstanding and exercisable options under the option plans at December 31, 2012 follows:

	Stock Options Outstanding			Stock Options Exercisable	
Range of exercise prices	Number of shares	Weighted average remaining contractual life (in years)	Weighted average exercise price per share	Number of shares	Weighted average exercise price per share
$1.55 - 1.55	960,000	9.72	$ 1.55	120,000	$ 1.55
1.64 - 2.46	683,067	6.87	1.89	289,389	1.70
2.66 - 2.66	936,825	9.07	2.66	176,953	2.66
2.72 - 8.25	975,328	7.05	6.12	664,601	6.30
8.69 - 11.22	1,026,537	6.36	9.84	816,095	9.93
11.75 - 24.97	997,285	5.28	15.95	887,339	16.17
	5,579,042	7.38	6.68	2,954,377	9.41

Expense Information for Employee Stock Option Awards

The Company recognized stock-based compensation expense, related to employee stock option awards, of $3,825, $4,621 and $4,663 for the years ended December 31, 2012, 2011 and 2010, respectively. At December 31, 2012, there was approximately $5,638 of pre-tax stock-based compensation expense; net of estimated forfeitures, related to unvested awards not yet recognized which is expected to be recognized over a weighted average period of 2.23 years.

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(In thousands, except for share and per share amounts)

12. Stock-Based Compensation (Continued)

For the years ended December 31, 2012, 2011 and 2010, the Company determined the fair value of stock options using the Black-Scholes option pricing model with the following assumptions for option grants, respectively:

	Year Ended December 31,		
	2012	2011	2010
Expected dividend yield	—	—	—
Risk-free rate	0.67% - 1.15%	0.88% - 2.38%	1.41% - 2.59%
Expected option term (in years)	5.3 - 5.5	5.5 - 5.6	5.4 - 5.6
Volatility	84% - 87%	77% - 80%	79% - 80%

For the year ended December 31, 2012, the Company determined its volatility assumption based on actual market price fluctuations experienced during its trading history. For the years ended December 31, 2011 and 2010 expected volatility was estimated based on the Company's historical volatility benchmarked against the historical volatilities of a peer group of similar public companies. Due to the Company's limited trading history prior to 2012, the Company believed that this approach provided additional information about future stock price movements when compared to analyzing the historical volatility of the Company on its own.

The risk-free interest rate used for each grant is equal to the U.S. Treasury yield curve in effect at the time of grant for instruments with a term similar to the expected life of the related option.

For the years ended December 31, 2012, 2011 and 2010, the expected term of the options is based upon evaluation of historical and expected future exercise behavior.

The stock price volatility and expected terms utilized in the calculation involve management's best estimates at that time, both of which impact the fair value of the option calculated under the Black-Scholes methodology and, ultimately, the expense that will be recognized over the life of the option. The accounting standard for stock-based compensation requires that the Company recognize compensation expense for only the portion of options that are expected to vest. Therefore, the Company has estimated expected forfeitures of stock options for the grants valued. In developing a forfeiture rate estimate, the Company considered its historical experience and actual forfeitures for the year. The Company will continue to evaluate its forfeiture rate as compared to the actual number of forfeitures in future periods to determine if adjustments to compensation expense may be required.

Expense Information for Non-employee Stock Option Awards

During the years ended December 31, 2011 and 2010, the Company granted stock options to purchase 34,500, and 3,500 shares of common stock, respectively, to non-employee consultants. No stock options were awarded to non-employees during the year ended December 31, 2012, and all remaining non-employee awards were cancelled in early 2012 in connection with the Company's restructuring. Compensation expense related to non-employee options previously awarded were recognized over a period of four years and vested quarterly, contingent upon future services being provided by the consultants to the Company. The amount of non-employee stock compensation expense recorded by the Company for each of the three years ended December 31, 2012 was insignificant.

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(In thousands, except for share and per share amounts)

12. Stock-Based Compensation (Continued)

The fair value of each unvested option granted to non-employees was revalued at year end using the Black-Scholes option pricing model with the following assumptions:

	Year Ended December 31,	
	2011	2010
Expected dividend yield	—	—
Risk-free rate	1.89% - 3.47%	2.53% - 3.84%
Expected option term (in years)	10	10
Volatility	76% - 78%	79% - 80%

13. Income Taxes

There is no provision for income taxes because the Company has incurred tax losses since inception. The reported amount of income tax expense for the years differs from the amount that would result from applying domestic federal statutory tax rates to pretax losses primarily because of changes in valuation allowance. Significant components of the Company's net deferred tax assets are as follows:

	December 31,	
	2012	2011
Net operating loss carryforward	$ 72,016	$ 61,269
Capitalization of research and development expenses	2,763	3,606
Credit carryforwards	7,024	6,762
Depreciation	2,603	2,666
Non-Qualified Stock Options	4,213	3,864
Deferred Revenue	417	15,244
Other temporary differences	1,541	1,261
Total deferred tax assets	90,577	94,672
Valuation allowance	(90,577)	(94,672)
Net deferred tax assets	$ —	$ —

The items accounting for the difference between the income tax benefit computed at the federal statutory rate of 34% and the provision for income taxes were as follows:

	Year Ended December 31,		
	2012	2011	2010
Federal income tax at statutory federal rate	34.0%	34.0%	34.0%
State taxes	7.8%	5.0%	4.1%
Permanent differences	19.6%	(2.4)%	(1.5)%
Tax credits	(10.5)%	2.4%	2.0%
State rate change on deferred balances	3.1%	1.4%	(6.5)%
Expiration of net operating losses and credits	49.2%	(1.6)%	(0.3)%
Other	9.8%	1.0%	(3.0)%
Change in valuation allowance	(113.0)%	(39.8)%	(28.8)%
Total	0.00%	0.00%	0.00%

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(In thousands, except for share and per share amounts)

13. Income Taxes (Continued)

The Company follows the accounting guidance for income taxes including guidance, which addresses accounting for uncertainty in income taxes. This guidance prescribes a threshold for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. It also provides guidance on de-recognition, classification, interest and penalties, accounting in interim periods, disclosures and transitions. The Company had no amounts recorded for any unrecognized tax benefits as of December 31, 2012, 2011 and 2010.

The tax years 2009 through 2012 remain open to examination by major taxing jurisdictions to which the Company is subject, which are primarily in the U.S. Additionally, the Company can be audited for any loss year up to three years after the year in which the loss is utilized to offset taxable income. This would include loss years prior to 2009.

The Company's policy is to record estimated interest and penalties related to uncertain tax positions as income tax expense. As of December 31, 2012, 2011 and 2010, the Company had no accrued interest or penalties recorded related to uncertain tax positions.

At December 31, 2012, the Company had net operating loss carryforwards (NOLs) for federal and state income tax purposes of $211,016 and $148,611, respectively. Included in the federal and state net operating loss carryforwards is approximately $19,213 of deductions related to the exercise of stock options subsequent to the adoption of amended accounting guidance related to stock-based compensation. This amount represents an excess tax benefit as defined under the amended accounting guidance related to stock-based compensation and has not been recorded as a deferred tax asset. The Company's existing federal and state net operating loss carryforwards begin to expire in 2013. The Company also had available research and development credits for federal and state income tax purposes of approximately $4,502 and $3,577, respectively. The federal and state research and development credits will begin to expire in 2014 and 2016, respectively. As of December 31, 2012, the Company also had available investment tax credits for state income tax purposes of $100, which also begin to expire in 2013. Management of the Company has evaluated the positive and negative evidence bearing upon the realizability of its deferred tax assets, which are comprised principally of net operating loss carryforwards and research and development credits. Under the applicable accounting standards, management has considered the Company's history of losses and concluded that it is more likely than not that the Company will not recognize the benefits of federal and state deferred tax assets. Accordingly, a full valuation allowance has been established against the deferred tax assets.

Utilization of the net operating loss and research and development credit carryforwards may be subject to a substantial annual limitation under Section 382 of the Internal Revenue Code of 1986 due to ownership change limitations that have occurred previously or that could occur in the future. These ownership changes may limit the amount of net operating loss and research and development credit carryforwards that can be utilized annually to offset future taxable income and tax, respectively. The Company completed an evaluation of its ownership changes through December 31, 2011 and has determined that its NOL and R&D credit carryforwards originating on or before that date are not subject to an annual limitation under Section 382. The Company has not currently completed an evaluation of ownership changes through December 31, 2012. To the extent an ownership change occurs in the future, the net operating loss and credit carryforwards may be subject to limitation.

No additional provision has been made for U.S. income taxes related to the undistributed earnings of the wholly-owned subsidiaries of Metabolix, Inc. or for unrecognized deferred tax liabilities for

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(In thousands, except for share and per share amounts)

13. Income Taxes (Continued)

temporary differences related to investments in subsidiaries. As such, earnings are expected to be permanently reinvested, the investments are essentially permanent in duration, or the Company has concluded that no additional tax liability will arise as a result of the distribution of such earnings. A liability could arise if amounts are distributed by such subsidiaries or if such subsidiaries are ultimately disposed. It is not practical to estimate the additional income taxes related to permanently reinvested earnings or the basis differences related to investment in subsidiaries. Unremitted earnings at December 31, 2012 and December 31, 2011 approximated $252 and $128, respectively.

14. Employee Benefits

The Company maintains a 401(k) savings plan in which substantially all of its regular U.S. employees are eligible to participate. Participants may contribute up to 60% of their annual compensation to the plan, subject to eligibility requirements and annual IRS limitations. The Company's plan provides for a matching contribution in common stock of up to 4.5% of a participant's total compensation dependent upon the level of participant contributions made during the plan year. Pursuant to this plan, the Company issued 179,336, 68,558 and 35,151 shares of common stock during the twelve months ended December 31, 2012, 2011 and 2010, respectively, and recorded $408, $529 and $443, respectively, of related expense. Company contributions are fully vested upon issuance.

15. Fair Value Measurements

The Company has certain financial assets recorded at fair value which have been classified as Level 1or 2 within the fair value hierarchy as described in the accounting standards for fair value measurements. Fair value is the price that would be received from the sale of an asset or the price paid to transfer a liability in an orderly transaction between independent market participants at the measurement date. Fair values determined by Level 1 inputs utilize observable data such as quoted prices in active markets for identical instruments. Fair values determined by Level 2 inputs utilize data points other than quoted prices in active markets that are observable either directly or indirectly. Fair values determined by Level 3 inputs utilize unobservable data points in which there is little or no market data, which require the reporting entity to develop its own assumptions. The fair value hierarchy level is determined by the lowest level of significant input.

The Company's financial assets classified as Level 2 have been initially valued at the transaction price and subsequently valued typically utilizing third party pricing services. Because the Company's investment portfolio may include securities that do not always trade on a daily basis, the pricing services use many observable market inputs to determine value including reportable trades, benchmark yields and benchmarking of like securities. The Company validates the prices provided by the third party pricing services by reviewing their pricing methods and obtaining market values from other pricing sources. After completing the validation procedures, the Company did not adjust or override any fair value measurements provided by these pricing services as of December 31, 2012 and 2011.

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(In thousands, except for share and per share amounts)

15. Fair Value Measurements (Continued)

The tables below present information about the Company's assets that are measured at fair value on a recurring basis as of December 31, 2012 and December 31, 2011 and indicate the fair value hierarchy of the valuation techniques utilized to determine such fair value.

	Fair value measurements at reporting date using			
Description	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Balance as of December 31, 2012
Cash equivalents:				
Money market funds	$ 11,157	$ —	$ —	$ 11,157
Government securities	—	2,015	—	2,015
Short-term investments:				
Government securities	—	29,201	—	29,201
Long-term investments:				
Government securities	—	2,508	—	2,508
	$ 11,157	$ 33,724	$ —	$ 44,881

	Fair value measurements at reporting date using			
Description	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Balance as of December 31, 2011
Cash equivalents:				
Money market funds	$ 18,262	$ —	$ —	$ 18,262
Short-term investments:				
Corporate debt	—	29,866	—	29,866
Government securities	—	25,712	—	25,712
Long-term investments:				
Government securities	—	1,503	—	1,503
Total	$ 18,262	$ 57,081	$ —	$ 75,343

16. U.S. Department of Energy Grant

In 2011, the Company entered into a multi-year $6.0 million grant agreement entitled, *Renewable Enhanced Feedstocks for Advanced Biofuels and Bioproducts*, with the U.S. Department of Energy for the development of switchgrass. The Company will use the funds to perform research to enhance the yield of bio-based products, biopower, or fuels made from switchgrass to produce denser biomass and other products that can be further processed to make fuels such as butanol, chemicals such as propylene, and other materials to improve the economic competitiveness of future biorefineries. Continued receipt of grant proceeds is contingent upon the availability of government appropriated funds and the Company's ability to make substantial progress towards meeting the objectives of the award. The Company will recognize revenue from the grant over the term of the agreement as it incurs related research and development costs and provided it meets its prorated cost-sharing obligation of

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(In thousands, except for share and per share amounts)

16. U.S. Department of Energy Grant (Continued)

approximately $3.9 million. The Company may elect to retain rights to inventions it conceives or reduces to practice in the performance of work under the award, subject to certain rights of the U.S. Government.

During the years ended December 31, 2012 and 2011, the Company recognized $1,578 and $515 in revenue related to this grant, respectively.

17. Inventory

During the quarter ended March 31, 2012, the Company acquired raw material and finished goods inventory of biopolymer from Telles, as a result of the termination of the joint venture with ADM. As of December 31, 2012, inventory consisted of the following:

	December 31, 2012
Raw materials	$ 640
Work-in-process	2
Finished goods	2,562
Total inventory	$ 3,204

The Company did not own inventory at December 31, 2011.

18. Restructuring

In connection with the Telles termination, in the first quarter of 2012, the Company restructured its biopolymers business and downsized its operations to more appropriately align its 2012 business priorities and strategic plans with current cash and investment resources. The Company recognized $920 of restructuring charges during its fiscal year ended December 31, 2012, as follows:

	Original Charges and Amounts Accrued	(Reversals) or Adjustments to Charges	Amounts Paid through December 31, 2012	Amounts Accrued at December 31, 2012
Employee severance, benefits and related costs	$ 837	$ 18	$ 855	$ —
Contract termination costs	22	43	65	—
	$ 859	$ 61	$ 920	$ —

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(In thousands, except for share and per share amounts)

19. Geographic Information

The geographic distribution of the Company's revenues and long-lived assets from continuing operations is summarized as follows:

	U.S.	Canada	Eliminations	Total
Year Ended December 31, 2012				
Net revenues to unaffiliated customers	$ 42,136	$ 180	$ —	$ 42,316
Inter-geographic revenues	—	737	(737)	—
Net revenues	$ 42,136	$ 917	$ (737)	$ 42,316
Identifiable long-lived assets	$ 1,309	$ 49	$ —	$ 1,358
Year Ended December 31, 2011				
Net revenues to unaffiliated customers	$ 1,300	$ 125	$ —	$ 1,425
Inter-geographic revenues	—	859	(859)	—
Net revenues	$ 1,300	$ 984	$ (859)	$ 1,425
Identifiable long-lived assets	$ 2,185	$ 91	$ —	$ 2,276
Year Ended December 31, 2010				
Net revenues to unaffiliated customers	$ 448	$ —	$ —	$ 448
Inter-geographic revenues	—	449	(449)	—
Net revenues	$ 448	$ 449	$ (449)	$ 448
Identifiable long-lived assets	$ 2,696	$ 80	$ —	$ 2,776

Foreign revenue is based on the country in which the Company's legal subsidiary is domiciled.

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(In thousands, except for share and per share amounts)

20. Summary of Quarterly Financial Data (unaudited)

The following tables summarize the unaudited quarterly financial data for the last two fiscal years.

	Quarter ended			
	March 31,	June 30,	September 30,	December 31,
2012				
Total revenues	$ 39,322(1)	$ 923	$ 674	$ 1,397
Income (loss) from operations	28,823	(7,957)	(7,743)	(9,520)
Net income (loss)	28,840	(7,948)	(7,745)	(9,517)
Basic net income (loss) per share	0.84	(0.23)	(0.23)	(0.28)
Diluted net income (loss) per share	0.84	(0.23)	(0.23)	(0.28)
2011				
Total revenues	$ 326	$ 191	$ 469	$ 439
Loss from operations	(9,660)	(10,005)	(9,579)	(9,617)
Net loss	(9,640)	(9,982)	(9,560)	(9,603)
Basic net loss per share	(0.36)	(0.33)	(0.28)	(0.28)
Diluted net loss per share	(0.36)	(0.33)	(0.28)	(0.28)

Full year amounts may not sum due to rounding.

(1) In 2012, we recognized $38,885 of deferred revenue associated with the termination of our commercial alliance with Archer Daniels Midland Company.

QuickLinks -- Click here to rapidly navigate through this document

Exhibit 10.27

CONFIDENTIAL DISCLOSURE AGREEMENT

Metabolix, Inc., with a principal address at 21 Erie Street, Cambridge, Massachusetts 02139 ("Metabolix") desires to disclose to **Jack W. Schuler** (the "Recipient"), with an address at 28161 North Keith Drive, Lake Forest, Illinois 60045, certain confidential and proprietary business information.

It is agreed that all disclosures of Confidential Information of Metabolix to the Recipient shall be governed by the following terms and conditions:

1. *Purpose.* Metabolix shall disclose to the Recipient such of its Confidential Information as Metabolix, in its sole discretion, deems necessary or desirable for the Recipient to provide strategic advice to Metabolix (the "Purpose").

2. *Confidential Information.* As used herein, the term "Confidential Information" means information and/or materials which Metabolix considers to be confidential or proprietary in nature including, but not limited to, trade secrets, know-how, inventions, improvements, chemical compounds and compositions, techniques, research and development data, financial, sales or marketing plans and data, technical data, drawings, photographs, process information, samples, equipment, specifications, designs, apparatus, inventions, improvements and/or discoveries, whether or not legally protectable, and the like.

3. *Exceptions.* This Agreement imposes no obligation upon Recipient with respect to information that:

a. is in the public domain at the time of disclosure or later becomes part of the public domain through no breach of this Agreement;

b. the Recipient can demonstrate, by competent documentary proof, was in his possession without obligation of confidentiality prior to disclosure hereunder;

c. is acquired by the Recipient without obligation of confidentiality from a third party who has a legal right to disclose such information; or

d. is independently developed by the Recipient's employees without knowledge of or access to Metabolix's Confidential Information.

Specific Confidential Information is not within one of the above exceptions merely because it is encompassed by a more general disclosure or can be assembled by selection of disclosures from multiple sources that are individually within the exceptions.

4. *Use and Confidentiality.* Except as otherwise agreed in writing by Metabolix, the Recipient shall not use Metabolix's Confidential Information for any purpose other than the Purpose described above. The Recipient shall use the same degree of care to preserve the confidentiality of Metabolix's Confidential Information as he employs with respect to his own Confidential Information, but no less than a reasonable amount of care. The Recipient shall not divulge, in whole or in part, to any third party any of Metabolix's Confidential Information or the fact that discussions may be occurring between the Recipient and Metabolix or any of the terms of this Agreement without the prior written consent of Metabolix, except to the Recipient's professional advisors and attorneys (together, "Representatives") who reasonably require knowledge of such Confidential Information. The Recipient shall inform his Representatives of the confidential nature of such Confidential Information, shall cause his Representatives to treat the Confidential Information confidentially, and shall be responsible for a breach of this agreement by his Representatives. Notwithstanding the foregoing, in the event that the Recipient or any of his Representatives receive a request or are required by deposition, interrogatory, request for documents, subpoena, civil investigative demand or similar process to disclose Confidential Information, the Recipient shall, and shall cause his Representatives to, (a) promptly notify Metabolix of the existence, terms and circumstances surrounding such request, (b) consult with Metabolix on the advisability of taking legally available steps to resist or narrow such request, and (c) assist Metabolix, at its expense, in seeking a protective order or other appropriate remedy. In the event that such protective

order or other remedy is not obtained or that Metabolix waives compliance with the provisions hereof, the Recipient or any of his Representatives, as the case may be, may disclose to any tribunal only that portion of the Confidential Information which the Recipient or his Representatives are advised by counsel is legally required to be disclosed, and the Recipient and his Representatives shall exercise reasonable best efforts to obtain assurance that confidential treatment will be accorded such Confidential Information .

5. *Return of Confidential Information.* Upon request, the Recipient shall return or destroy all of Metabolix's Confidential Information, provided that a single copy can be retained in the Recipient's archives for the sole purpose of monitoring compliance with this Agreement.

6. *Acknowledgement.* The Recipient hereby acknowledges that he may obtain material nonpublic information as a result of Metabolix disclosures hereunder. Recipient agrees that while he is in possession of material, nonpublic information about Metabolix, the Recipient, his spouse, children or other family members living in the same household, and any investment fund, trust, retirement plan, partnership, corporation or other entity over which Recipient has the ability to influence or direct investment decisions concerning securities (collectively, "Affiliates"), are prohibited from the following activities:

- trading in Metabolix securities (including trading in options, puts, calls or other derivative securities of Metabolix);
- having others trade for Recipient in Metabolix securities;
- giving trading advice of any kind about Metabolix;
- disclosing the material, nonpublic information about Metabolix to anyone else who might then trade ("tipping"); and
- trading in the securities of any other company about which Recipient learns of material nonpublic information through discussions with Metabolix.

7. *Limitation on Certain Actions.* For a period of 12 months from the date of this Agreement, neither the Recipient nor any of his Representatives shall make any public announcement with respect to, or submit a proposal for, or offer of (with or without conditions) (x) any merger, consolidation, business combination, tender or exchange offer, purchase of Metabolix's assets or businesses, or similar transactions involving Metabolix or (y) any recapitalization, restructuring, liquidation or other extraordinary transaction involving Metabolix or any of its securities or assets. Recipient's obligations under this Paragraph 7 shall survive the termination of this Agreement pursuant to Paragraph 8 and continue through the first anniversary of the date of this Agreement.

8. *Term.* This Agreement shall have a term of one (1) year from the effective date of this Agreement; provided that either party may terminate this Agreement upon ten (10) days written notice to the other, and provided further that the Recipient's obligations under Paragraphs 4 and 5 shall survive for five (5) years after the expiration or termination of this Agreement.

9. *No Implied Contract or License.* No rights or obligations, including third party rights, other than those expressly recited herein are to be implied from the terms hereof. Nothing in this Agreement shall be construed to establish or require the establishment of any contract or arrangement of any kind, other than regarding the restrictions on disclosure and use as set forth herein, including without limitation any contract or arrangement for the supply of products or services, or any transfer, license, or purchase of technology by the parties hereto.

10. *Right to Disclose.* Metabolix makes no representations or warranties, express or implied, with respect to its Confidential Information, including but not limited to warranties of merchantability and fitness for a particular purpose, nor any representation or warranty with respect to the accuracy or completeness of its Confidential Information. Metabolix shall have no liability to Recipient or his Representatives relating to or arising from use of or reliance on the Confidential Information.

11. *Governing Law.* This Agreement is entered into under, and shall be construed in accordance with, the laws of the Commonwealth of Massachusetts.

12. *Entire Agreement; Specific Performance.* This Agreement contains the entire agreement and understanding between the parties with respect to the subject matter hereof. No modification or alteration of this Agreement shall be effective unless made in writing and signed by both parties. Neither the discontinuation of discussions between the parties nor any other fact (except express written modification hereof) shall relieve either party from its obligations hereunder. This Agreement shall inure to the benefit of and be binding upon the parties hereto, their successors and assigns. The Recipient acknowledges and agrees that money damages would not be a sufficient remedy for any breach (or threatened breach) of this letter agreement by the Recipient or his Representatives and that Metabolix shall be entitled to equitable relief, including injunction and specific performance, as a remedy for any such breach (or threatened breach), without proof of damages, and each party further agrees to waive, and use his best efforts to cause his Representatives to waive, any requirement for the securing or posting of any bond in connection with any such remedy. Such remedies shall not be the exclusive remedies for a breach of this letter agreement, but will be in addition to all other remedies available at law or in equity. The illegality, invalidity or unenforceability of any provision hereof under the laws of any jurisdiction shall not affect its legality, validity or enforceability under the laws of any other jurisdiction, nor the legality, validity or enforceability of any other provision.

[signature page follows]

Accepted and Agreed to:

RECIPIENT:	METABOLIX, INC.
/s/ JACK W. SCHULER	By: /s/ SARAH P. CECIL
Jack W. Schuler	Sarah P. Cecil, *General Counsel*
Date: Feb. 6, 2013	Date: Feb. 6, 2013

QuickLinks

QuickLinks -- Click here to rapidly navigate through this document

Exhibit 21.1

Subsidiary Name	Jurisdiction of Organization
Metabolix Securities Corp.	MA
Metabolix Oilseeds, Inc.	Canada
Metabolix GmbH	Germany

QuickLinks

QuickLinks -- Click here to rapidly navigate through this document

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-3 (No. 333-172725) and S-8 (Nos. 333-138631, 333-145232, 333-155115, 333-157869, 333-165405, 333-172724 and 333-181268) of Metabolix, Inc. of our report dated March 28, 2013 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP
Boston, Massachusetts
March 28, 2013

QuickLinks

QuickLinks -- Click here to rapidly navigate through this document

EXHIBIT 31.1

CERTIFICATIONS

I, Richard P. Eno certify that:

1. I have reviewed this annual report on Form 10-K of Metabolix, 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: March 28, 2013

/s/ RICHARD P. ENO

Name: Richard P. Eno
Title: *President and Chief Executive Officer*
(Principal Executive Officer)

QuickLinks

QuickLinks -- Click here to rapidly navigate through this document

EXHIBIT 31.2

CERTIFICATIONS

I, Joseph D. Hill certify that:

1. I have reviewed this annual report on Form 10-K of Metabolix, 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: March 28, 2012

/s/ JOSEPH D. HILL

Name: Joseph D. Hill
Title: *Chief Financial Officer*
(Principal Financial and Accounting Officer)

QuickLinks

QuickLinks -- Click here to rapidly navigate through this document

EXHIBIT 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 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 Metabolix, Inc. (the "Company") for the year ended December 31, 2012 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we, Richard P. Eno, President, Chief Executive Officer and Principal Executive Officer of the Company and Joseph D. Hill, Chief Financial Officer and Principal Financial and Accounting 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, to my knowledge that:

1. the Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended, and

2. the information in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

This certification is being provided pursuant to 18 U.S.C. 1350 and is not to be deemed a part of the Report, nor is it to be deemed to be "filed" for any purpose whatsoever.

METABOLIX, INC.

March 28, 2013 By: /s/ RICHARD P. ENO

Richard P. Eno
President and Chief Executive Officer (Principal Executive Officer)

March 28, 2013 By: /s/ JOSEPH D. HILL

Joseph D. Hill
Chief Financial Officer (Principal Financial and Accounting Officer)

QuickLinks