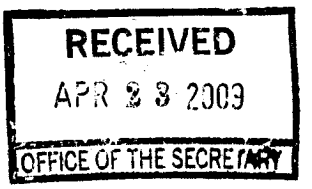




# HELIX BIOMEDIX®

Inspired by Nature. **Powered by Science.**

**2008 Annual Report**

## Corporate Profile

Helix BioMedix, Inc. is a biopharmaceutical company whose vision is to become the industry leader in developing and commercializing bioactive peptides. We have over 50 issued and pending patents supporting an extensive library of peptides that are diverse in structure, sequence and bioactivity. Our pharmaceutical program has created novel, first-in-class lipohexapeptide drug candidates, with an initial focus on the large topical anti-infective market targeting indications such as acne, rosacea, MRSA and fungal infections. We are also focusing on the design of peptides for the consumer market where our partners both supply high-quality ingredients to the cosmetics and cosmeceuticals sectors and sell finished peptide-based products to consumers.

Our core competencies include peptide design, synthesis and characterization together with assay development, screening, tissue culture and microbiology, leveraged through relationships with contract research organizations and peptide manufacturers. We have the capability to take peptide-based products from a theoretical concept to a safe and efficacious finished product.

## Summary of Accomplishments:

| | |
|---|---|
| **2009** | |
| February and March | Closed approximately $3.5 million financing |
| January | Launched new corporate website |
| **2008** | |
| December | Introduced 4 new cosmeceutical peptides into the active ingredient market |
| November | Launched first proprietary branded product – the Striking™ Skin Care line with SmartPeptide™ technology |
| | Reported third quarter results with sequential revenue increase |
| August | Signed license agreement with Rodan + Fields, LLC, which is owned by the original creators of the Proactiv® acne treatment line |
| | Received patent for a novel class of antimicrobial, which includes the company's lead pre-clinical lipohexapeptide candidates |
| April | Received patent for peptides used in skin care applications and products, which are currently included in more than 20 commercially available products |
| March | Reported 2007 financial results, including the highest annual revenue in the company's history |
| February | Closed $3.0 million financing |
| January | Entered into manufacturing and supply agreement to provide commercial quantities of peptides to our partners |

**Dear Stockholders,**

During 2008, we continued to build upon the momentum achieved during 2007 and took a number of significant steps towards the further commercialization of our innovative bioactive peptides. Despite the difficult economic conditions, we were able to achieve the highest annual revenue in our history and are well positioned to continue the growth of our business with respect to both our consumer and pharmaceutical programs.

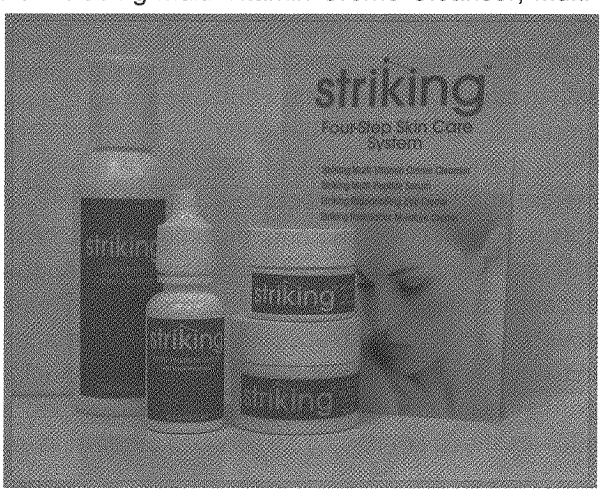
**Execution**

**2008 Strategic Milestones**

- Launch core anti-aging skin care product offering
- Generate material revenue from ingredient supplier licensing partners
- Initiate clinical development of our lead drug candidate

At the beginning of 2008, we established three key strategic milestones that served as our focus areas throughout the year. Of these, two were achieved, and the timeline associated with the third has been extended due to the deteriorating capital markets throughout the latter part of the year.

First and most notably, in November we released our Striking™ Skin Care line, which includes our proprietary SmartPeptide™ technology. These anti-aging products represent our first Helix BioMedix branded line and introduced the exclusive HelixBioMedix SmartPeptide™ technology, Heptapeptide-7, that helps nourish keratinocytes to support skin renewal. Targeted at the health and beauty consumer market, the Striking Skin Care line features a core ritual of daily essentials including Multi-Vitamin Creme Cleanser, Multi-Peptide Serum, Rejuvenating Eye Creme and Restorative Moisture Creme. Striking is currently distributed via catalog and the Internet through Gold Violin and Norm Thompson, subsidiaries of Orchard Brands Corporation, a $1 billion revenue company that specializes in the over-55 consumer market. Customer response to Striking has been overwhelmingly positive, and we expect this line to be highly successful as we move to expand our distribution channels in 2009.




Also during the year, we continued to build and expand our licensing relationships. From a financial perspective, we generated approximately $563,000 in revenue, which represented an increase of 21 percent when compared to 2007. The number of products in the market containing Helix BioMedix peptides continues to grow and the number of peptides that we have available for licensing has expanded from three at the end of 2007 to more than eight as of today. In particular, two of our licensing partners, Grant Industries, Inc. and Evonik GmbH, made significant progress in advancing the marketing of Helix BioMedix peptides within their product offerings. I am also excited about the license agreement we signed in August with Rodan + Fields, LLC, which is a leading clinical skincare brand by Stanford University-trained dermatologists Katie Rodan, M.D. and Kathy Fields, M.D. Drs. Rodan and Fields, the creators of the U.S.-leading acne brand, ProActiv® Solution, are pioneers in dermatologist-developed skincare regimens and are utilizing our peptides in the development of a line to treat sun damage, biological aging and sensitive skin. We currently expect Rodan + Fields initial products containing our peptides to be introduced to the market during the first half of 2009.

Finally, as it relates to our third strategic milestone, it was our objective to move our lipohexapeptide pharmaceutical program into clinical trials during 2008, but we were not able to secure the funding required to do so. During the year, we engaged an investment banking firm and met with many interested partners and investors with the goal of securing the funding necessary to move our clinical program forward. However, the capital raising environment deteriorated rapidly during the second half of 2008. As a result, the timeline required to initiate clinical trials has been extended into 2009.

**Creating Value**

In addition to these achievements, we also had a number of other significant accomplishments during the year in the areas of intellectual property, peptide supply and funding that have further built upon the value of our products, technology and business.

| Helix # | Program | Profile | Status |
|---|---|---|---|
| HB1345 | Rx Program | Topical anti-infective | Preclinical |
| HB1275 | Rx Program | Topical antifungal | Preclinical |

| Helix # | INCI name | Profile | License |
|---|---|---|---|
| HB64 | Oligopeptide-10 | Skin care | Licensed |
| HB168pal | Palmitoyl-hexapeptide-14 | Skin care | Licensed |
| HB168 | Hexapeptide-21 | Skin care | Licensed |
| HB1423 | Tetrapeptide-14 | Skin care | Licensed |
| HB1422 | Tetrapeptide-16 | Skin care | Licensed |
| HB1518 | Pentapeptide-21 | Skin care | Licensed |
| HB1545 | Pentapeptide-22 | Skin care | Licensed |
| PiP3 | NA | Skin care | Licensed |
| H14 | Tetrapeptide-17 | Skin care | Licensed |
| H26 | Unassigned | Skin care | Licensed |
| H11-H14 | Unassigned | Skin care | Licensed |
| HB802 | Unassigned | Skin care | Licensed |
| HB1410 | Unassigned | Skin care | Licensed |
| HB1061 | Heptapeptide-7 | Skin care | Helix Brands |
| HB Cellulite | Lipid modulation | Skin care | Unlicensed |
| HB Pigment | Melanocyte / melanin | Skin care | Unlicensed |
| HB Hair | Hair growth / wound healing | Hair care /skin care | Unlicensed |

During 2008, we were issued two key patents. In April, we received a patent covering more than eighty proprietary peptides for use in cosmetic and skin care applications and products. There are currently more than fifty products in the market that utilize our peptides covered under this patent, including such cosmeceutical brands as FusionBeauty®, Smashbox®, Isomers®, and B. Kamins®. Additionally, in August we were issued a patent covering a novel class of antimicrobial, which includes the company's lead pre-clinical lipohexapeptide candidates. This patent covers a family of hexapeptide antimicrobial agents for use as broad spectrum topical anti-infectives. Initial development will focus on dermatological indications such as acne, rosacea and atopic dermatitis. Additional applications are expected to include prevention of hospital acquired infections, such as those caused by MRSA and other multi-resistant pathogens.

Another achievement during 2008 was our supply agreement with Peptisyntha, Inc., an affiliate of Solvay S.A., by which Peptisyntha agreed to supply our requirements for certain peptides at set prices for two years. This agreement is significant as it ensures that we can supply commercial quantities of peptides once products are developed through our pharmaceutical program, while also continuing to provide peptide supplies to our marketing partners for our rapidly growing consumer product segment.

Finally, in the first quarter of 2009, we closed a convertible debt financing of approximately $3.5 million, which ensures that we have the capital required to fund our business and operations for the near future.

**Looking Ahead**

Looking forward, we expect 2009 to be a year of continued growth for the company as we continue our efforts to further commercialize our peptides through our consumer product lines and licensing partners, as well as through the initiation of our pharmaceutical program. To that end, we have once again established three key objectives that will serve as the company's focus areas in 2009.

**2009 Strategic Milestones**

- Launch additional Helix BioMedix branded products and expand the distribution channels
- Significantly increase revenue from consumer products
- Initiate clinical development of our lead drug candidate

First, we expect to launch additional proprietary Helix BioMedix branded products during 2009 and also expand the distribution channels through which these products are marketed. As I mentioned previously, in 2008 we launched our Striking line of antiaging products, which are currently sold and distributed through two catalogues. In 2009, we intend to launch an additional proprietary line and expand our distribution channels to include additional catalogues and online channels as well as retail and direct marketing initiatives.

Our second key objective for 2009 is to significantly increase the revenue from our consumer products, which will drive the company towards profitability and ultimately serve as a platform from which to launch our pharmaceutical program.

Finally and equally important, we plan to begin clinical development of our lead Rx candidate and launch our lipohexapeptide program. While the funding environment remains challenging, we are engaged in discussions with numerous potential vendors and service providers regarding various aspects of the clinical process and are prepared to move rapidly forward when a partner is identified or as our funding will permit.

I am pleased with the progress we made during 2008. I would like to thank the entire Helix BioMedix team, including our employees, directors, partners and stockholders for a successful 2008, and I look forward to additional achievements and our continued success in the coming year.

Sincerely,

R. Stephen Beatty
President and Chief Executive Officer
March 26, 2009

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

# FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
**For the fiscal year ended December 31, 2008**

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
**For the transition period from _____ to _____**
**Commission File No. 33-20897-D**

# HELIX BIOMEDIX, INC.

*(Exact name of registrant as specified in its charter)*

| **Delaware** | **91-2099117** |
|---|---|
| *(State or other jurisdiction of incorporation or organization)* | *(I.R.S. Employer Identification No.)* |

**22118-20th Avenue Southeast, Suite 204, Bothell, Washington 98021**
*(Address of principal executive offices and zip code)*

**(425) 402-8400**
*(Registrant's telephone number, including area code)*

Securities registered pursuant to Section 12(b) of the Act: None

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 ☐ No ☒

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

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§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. ☒

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. (Check one):

| | |
|---|---|
| Large accelerated filer ☐ | Accelerated filer ☐ |
| Non-accelerated filer ☐ | Smaller reporting company ☒ |

(Do not check if a smaller reporting company)

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

The aggregate market value of the registrant's common stock, $0.001 par value per share, held by non-affiliates of the registrant on June 30, 2008 was $14,112,534, based on the closing sales price of $0.58 on that date. For purposes of this disclosure, shares of common stock held by executive officers and directors of the registrant have been excluded because such persons may be deemed to be affiliates.

As of March 19, 2009, 25,653,512 shares of the registrant's common stock were issued and outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the registrant's definitive proxy statement relating to the registrant's 2009 Annual Meeting of Stockholders, to be filed within 120 days of the end of the fiscal year ended December 31, 2008, are incorporated by reference into Part III hereof.

**HELIX BIOMEDIX, INC.**

**FORM 10-K**

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# PART I

## Forward-Looking Statements

Our disclosure and analysis in this Annual Report and in the documents incorporated by reference contain forward-looking statements, which provide our current expectations or forecasts of future events. Forward-looking statements include, without limitation:

- statements concerning possible or assumed future results of operations, trends in financial results and business plans, including those relating to earnings growth and revenue growth;
- statements about our product development schedule;
- statements about our future capital requirements and the sufficiency of our cash, cash equivalents, investments, and any other sources to meet these requirements;
- statements about our plans, objectives, expectations, and intentions; and
- other statements that are not historical facts.

Words such as "may," "should," "expect," "plan," "intend," "anticipate," "believe," "estimate," "predict," "potential," "could," "future," "target," and similar expressions may identify forward-looking statements, but the absence of these words does not necessarily mean that a statement is not forward-looking. Forward-looking statements are subject to known and unknown risks and uncertainties and are based on potentially inaccurate assumptions that could cause actual results to differ materially from those expected or implied by the forward-looking statements. Our actual results could differ materially from those anticipated in the forward-looking statements for many reasons, including the factors described in Item 1A, "Risk Factors" in this Annual Report. Other factors besides those described in this Annual Report could also affect actual results. You should carefully consider the factors described in Item 1A, "Risk Factors" in evaluating our forward-looking statements.

You should not unduly rely on these forward-looking statements, which speak only as of the date of this Annual Report. We undertake no obligation to publicly revise any forward-looking statement to reflect circumstances or events after the date of this Annual Report or to reflect the occurrence of unanticipated events. You should, however, review the factors and risks we describe in the reports we file from time to time with the Securities and Exchange Commission, or SEC, after the date of this Annual Report.

## ITEM 1. *BUSINESS*

### Overview

Helix BioMedix, Inc. is a biopharmaceutical company with an extensive library of structurally diverse bioactive peptides and patents covering hundreds of thousands of peptide sequences. Our mission is to enrich clinical practice and the patient/consumer experience by developing and commercializing topically-applied products which offer the benefits of our advanced bioactive small molecule peptide technology. Our vision is to be recognized as the world leader in the identification, qualification and commercialization of natural and synthetic peptides.

We have developed small, short-chain peptides with anti-infective, anti-inflammatory and modulatory properties such as the stimulation of cell proliferation and migration. These peptides are targeted for use as ingredients in cosmeceutical products and as new topical therapeutics. Possible applications include anti-aging skin care, acne treatment, wound healing, and the treatment and prevention of infections.

During our initial commercialization efforts, we successfully identified and characterized bioactivities exhibited by natural innate-immunity peptide sequences that have potential cosmeceutical and therapeutic applications. By re-engineering these peptides, we created small, cost-effective bioactive molecules that not only are capable of delivering demonstrable benefits in skin care products but also have the potential to deliver therapeutic benefits as topically applied dermatological products. Subsequently, we have leveraged our knowledge of peptide sequences to expand the application of such molecules to multiple areas within dermatology.

In addition to our focus on peptides for use in cosmeceutical skin care and dermatological therapies, we believe our peptide library also promises new opportunities in certain therapeutic areas such as the prevention of Methicillin Resistant *Staphylococcus aureus* (MRSA) infection.

Our business was incorporated in 1988, and until early 2007, we operated primarily as a technology development company, generating a portfolio of intellectual property focused on identifying and developing synthetic bioactive peptides and, to a lesser extent, commercializing the extensive library of patented bioactive peptides we had developed. During 2007, we began generating consistent revenue through license agreements with skin care product manufacturers and through collaborative development agreements. In the third quarter of 2007, we moved from the development stage to the commercialization stage. In addition, in the fourth quarter of 2008, we launched our first proprietary branded skin care product line and began selling through distribution channels in the United States.

Our goal is to increase our focus on our pharmaceutical programs, and one of our objectives for 2009 is to initiate clinical development of our lead Rx candidates. To that end, we are exploring both potential partnership opportunities with pharmaceutical companies and potential sources of funding to support in-house clinical development work. We currently believe that in-house clinical development will be required to advance these programs prior to partnering with a pharmaceutical company.

Our website is located at www.helixbiomedix.com. Information contained on our website is not part of, and is not incorporated into, this Annual Report. Our filings with the SEC are available without charge on our website.

**Consumer Programs**

In 2004, we initiated license agreements with skin care contract manufacturers and materials suppliers for inclusion of certain of our proprietary cosmeceutical peptides in anti-acne and anti-aging skin care products. We rely on these industry supplier licensees to create both awareness and demand for our technology among their skin care customers.

We believe our peptide technology further holds potential as a technology platform for skin care industry leaders. We collaborate directly with leading skin care companies to identify opportunities for strengthening their brand position with proprietary products featuring our peptide technology.

In 2006, we initiated our first efforts to directly participate in the development of private label products containing our peptide technology. The first such product was developed through a license agreement with DermaVentures, LLC (DermaVentures), a related party, and was launched in late 2007. We plan to introduce additional new products into the marketplace through partnerships with skin care and personal care marketing companies.

***Anti-Acne Programs***

Acne is the most common skin disorder in the United States, affecting 40 to 50 million Americans. Nearly 85 percent of all people have acne at some point in their lives. By the mid-teens, more than 40 percent of adolescents have acne or acne scarring which requires treatment by a dermatologist. It is estimated that the total market for acne treatments will reach $3.0 billion in 2013.

We believe one of our lead peptides promises significant advantages for skin care companies in the over-the-counter acne treatment market. This proprietary peptide may be formulated into products with certain over-the-counter anti-acne ingredients for improvement in blemish-clearing benefits. The skin care benefits of this peptide derive from its ability to bind to a pro-inflammatory substance on the cell wall of the acne-causing bacteria. This pro-inflammatory substance is known to cause much of the redness associated with acne breakouts but, when bound to our peptide, is rendered inactive. Laboratory and clinical testing confirm the additional treatment benefits and higher level of consumer satisfaction associated with formulations that contain our peptide.

A number of companies have formulated and launched anti-acne products incorporating this peptide under license from us or through sublicense from our licensed distributors. We believe the use of this peptide is advantageous for globally marketed anti-acne products, not only because it supports more favorable outcomes with salicylic acid based treatment products, but also because it offers a favorable alternative to benzyol peroxide, an ingredient that is limited in application due to regulatory restrictions in certain markets as well as its potential harshness on sensitive skin. We anticipate further anti-acne product introductions in 2009.

***Anti-Aging Programs***

We have identified and qualified a number of peptides that target changes in the appearance of skin associated with the aging process. Because there are anti-aging skin benefits that derive from the skin's natural healing process, much of the anti-aging aspect of our peptide library has been derived from the screening processes associated with our pharmaceutical wound healing programs.

Peptides that target improvement in the appearance of aging skin may affect one or more of the age-related skin characteristics: lines and wrinkles, loss of elasticity, loss of firmness and definition, appearance of darkened areas or general unevenness of skin tone, rough texture, and thinning of the skin.

One of our lead anti-aging peptides targets several aspects of support for the skin's structural matrix. This peptide has been demonstrated to accelerate the migration of cells from the skin's uppermost layer to strengthen areas prone to lines and wrinkles and to impart a smoother, firmer appearance. This peptide has been clinically demonstrated to provide benefits equivalent to those of the leading prescription anti-aging products, but without the risk of irritation associated with aggressive retinoids. This peptide has been formulated into various cosmeceutical skin care products that are currently in the marketplace, and we anticipate further anti-aging product introductions in 2009.

We believe that, through the isolation of peptides derived from naturally recurring sequences that we call Replikines™, and specific combinations of those Replikines™ that we call Combikines™, we can increase the benefits derived from peptide applications in cosmetic anti-aging skin products. In August 2007, we entered into a license agreement with Goldschmidt GmbH, a wholly owned subsidiary of Evonik GmbH, a leading supplier of cosmetic ingredients. The agreement provides exclusive rights to certain of our peptides targeted towards skin care and personal care applications. Evonik launched its first Helix BioMedix technology-based peptides in January 2009.

Recently identified peptide opportunities for our anti-aging portfolio include a group of synthetic peptides that we have branded as Modukines™. These peptides work to interrupt processes that accelerate the undesirable changes in skin associated with aging, including the accelerated breakdown of collagen and elastin, the skin's key structural components. We believe several of these Modukines™ hold commercial promise beyond the area of anti-aging skin care as they support the skin's resiliency.

We are also working to identify opportunities for peptides to interrupt the pathways that lead to undesirable discoloring and mottled skin tone. We have identified numerous opportunities for the addition of peptides into therapeutic moisturizers and shampoos in support of the healthy appearance and comfort of skin and scalp. Potential benefits of adding certain peptides to cosmetically therapeutic moisturizers and hair care products include resistance to secondary infection associated with compromised skin, restoration of healthy appearance to cracked, flaky feet that do not respond to ordinary moisturizers, reduced flaking, and improved comfort associated with conditions of the scalp.

***Helix Branded Products***

We launched our first proprietary skin care products under the Striking™ brand in the fourth quarter of 2008. The product line, formulated to address perimenopausal and menopausal challenged skin, introduced the exclusive Helix BioMedix SmartPeptide™ Heptapeptide-7 technology that helps nourish keratinocytes to support skin renewal.

Targeted at the health and beauty consumer market, the Striking™ Skin Care line features a core ritual of daily essentials including Multi-Vitamin Creme Cleanser, Multi-Peptide Serum, Rejuvenating Eye Creme and

Restorative Moisture Creme. The serum, moisturizer and eye cream, formulated with Helix BioMedix's patented SmartPeptide™ technology, aim to address specific, targeted skin care concerns.

The products are initially being distributed via catalog and online through Gold Violin and Norm Thompson, subsidiaries of Orchard Brands Corporation.

We intend to introduce additional branded skin care products in 2009.

**Pharmaceutical Programs**

We are developing a novel, broad-spectrum, topical anti-infective for the treatment of skin and wound infections and the prevention of *Staphylococcus aureus* (*S. aureus*) infections including those caused by MRSA. These programs are based upon a first-in-class family of molecules known as lipohexapeptides (or small molecule peptides) that we developed to specifically combine the attributes of small molecule natural products with the advantages of antimicrobial peptides. This new class of anti-infective peptide has demonstrated significant improvement in activity, both *in vitro* and *in vivo*, over traditional antimicrobial peptides.

As with traditional antimicrobial peptides, our lead lipohexapeptides are rapidly cidal, fail to engender resistance *in vitro*, are readily synthesized and do not exhibit cross-resistance with other antibiotics. However, these molecules also have the advantage of being more stable, safer and more cost-effective to manufacture than traditional antimicrobial peptides. In addition, primarily due to acylation (addition of a lipid), these molecules are significantly more active in complex biological environments such as human serum or wound fluid. As a result, lipohexapeptides exhibit potent activity in animal infection models.

In pre-clinical testing, our lead molecules exhibited broad-spectrum antimicrobial activity against significant bacterial pathogens such as *S. aureus*, *Streptococcus pyogenes,* and *Pseudomonas aeruginosa,* and also pathogenic fungi such as Candida and Trichophyton species. This activity was maintained against antibiotic-resistant organisms such as MRSA and Vancomycin Resistant Enterococci. Our lead molecules have demonstrated significant activity in both bacterial and fungal animal infection models. In a *S. aureus* abraded skin infection model, our lead lipohexapeptides significantly reduced the number of bacteria following three days of once-daily dosing, and in many cases, our peptide eradicated the pathogen. In a guinea pig dermatophytosis model, our lead peptide candidates significantly reduced pathogen count and delivered clinical benefits comparable to Terbinafine, a drug approved by the FDA for onchomycosis. In both animal models, toxicity was not significantly different from that without peptides.

***Acne Anti-infective***

The National Institute of Arthritis, Musculoskeletal and Skin Disorders estimate that 17 million people are affected by acne in the United States every year. Acne is the most common skin disorder of adolescence and early adulthood (ages 11-30), affecting 80% of that demographic. Generally, mild to moderate cases are treated with topical medications, with more severe cases being treated with systemic or a combination of topical and systemic therapies. The market for prescription anti-acne products is estimated to reach $3.0 billion in 2013, and the largest segment of this is attributed to topical medications. While topical antibiotics such as Clindamycin provide clinical benefits and make up a large part of this market, the emergence of resistance to antibiotics such as Clindamycin occurred as early as 1979.

Our lipohexapeptide program is specifically directed at developing small, stable, and highly potent antimicrobial peptides capable of delivering therapeutic benefit within the clinical environment. These molecules overcome the specific challenges typically associated with acne such as the ability to work in an oil and serum environment and the ability to kill organisms deep within a pore. The efficacy observed in the dermatophytosis model described above demonstrates the penetration and antimicrobial effects of these molecules in the hair follicle of the host.

Furthermore, our lipohexapetide offers benefits in anti-inflammatory activity in addition to antimicrobial activities. We believe these properties may provide possible product application in the areas of rosacea and atopic dermatitis and, therefore, could lead to additional market opportunities for us.

*MRSA*

There is an ever-increasing global problem of antimicrobial resistance. This phenomenon has been well documented by the Centers for Disease Control and Prevention (CDCP), which identified a 28.5% increase in S. aureus oxacillin (methicillin) resistance in hospitals taking part in the National Nosocomial Infections Surveillance system from 1992-2003. From studies done for the period 2001-2002, the CDCP estimated that approximately 32% (89.4 million people) and 0.8% (2.3 million people) of the U.S. population is colonized with S. aureus and MRSA, respectively. Furthermore, on an annual basis from 1999-2000, the CDCP estimated that approximately 292,000 hospitalizations were related to the S. aureus infection, 126,000 cases of which were related to MRSA. Their report concludes that action is necessary to control the spread of this organism, and, to this end, several European countries have been successful in identifying and treating colonized patients quickly. The ability of lipohexapeptides to safely and effectively kill *S. aureus* in an abraded skin infection model, and the fact that this class of molecule exhibits potent activity against both methicillin and mupirocin (current therapy) resistant strains, support its development potential. The broad spectrum of activity exhibited by lipohexapeptides also enables possible application to chronic wounds, burn wounds, and trauma wounds in which multiple pathogens can cause significant morbidity and mortality. The market for such topical anti-infectives is currently estimated to be $1.5 billion per year.

***Topical fungal infections***

Trichophyton species are the major cause of a significant number of fungal skin infections, including athlete's foot, tinea capitis (scalp ringworm) and onychomycosis (nail fungus). Up to 70% of Americans have athlete's foot at any given time, 13% of United States school children (85% of children in many other countries) test positive for tinea capitis, and 22-40% of Americans 51-100 years of age have onychomycosis. Worldwide sales for prescription topical antifungals consequently exceeded $1.0 billion in 2006, with a similar level of sales for over-the-counter products addressing these conditions. Our pre-clinical data have shown that our lead molecules are capable of treating Trichophyton infections and hold great promise for multiple dermatological indications.

**Competition**

The cosmetic, biotechnology, and pharmaceutical industries are characterized by rapidly advancing technologies, intense competition, and a strong emphasis on proprietary products. Many participants in these industries, as well as academic institutions and other research organizations, are actively engaged in the discovery, research and development of products that could compete with our products under development. They may also compete with us in recruiting and retaining skilled scientific and management talent.

We believe that we face two broad classes of competitors:

- other companies developing therapies and skin care products based upon peptide technology; and
- companies using other technologies to address the same disease conditions and skin care concerns that we are targeting.

We are currently aware of several companies that are utilizing peptide-based technologies for antimicrobial applications including: Agennix, Inc., AM Pharma Holdings BV, Genarea Corporation, Inimex Pharmaceuticals, Inc., and Migenix, Inc. In the skincare and personal care area, several companies, including Sederma SAS, Pentapharm and Senetek PLC, sell patented specialty ingredients for cosmetic use.

**Suppliers**

We believe that there are several readily available sources of amino acids used for our peptides. We do not plan to manufacture peptides on a commercial scale. In planning for commercial-scale production, we have sought collaborations with several established manufacturers specializing in the production of peptides. With their assistance, we have developed production and cost plans that will support the inclusion of our peptides in a wide range of both consumer and clinical products. We believe several of these contract manufacturers are capable of scaling peptide synthesis to support all of our projected volume and configuration requirements.

In January 2008, we signed a manufacturing and supply agreement with Peptisyntha, Inc. for the supply of certain peptides to us. The purpose of the agreement is to enable us to meet the timing and quantity requirements of our licensees with respect to these peptides.

**Intellectual Property Rights**

We have developed a proprietary library containing a broad and diverse array of synthetic bioactive peptides. Our peptide library includes not only multiple proprietary peptides, but also various compositions of and methods of using those peptides. We believe that our patents and patent applications provide broad and early patent coverage that offers important competitive advantages that no other competitor can provide.

We rely on a combination of patent, trademark, copyright, and trade secret laws to protect our proprietary technologies and products. We aggressively seek U.S. and international patent protection applicable to our peptide technologies. We also rely on trade secret protection for our confidential and proprietary information and in-license technologies we view as necessary to our business plan.

We currently hold eleven issued patents and three pending patents in the United States, and 15 foreign issued patents and 24 foreign pending patents. These patents and pending patents describe six distinct classes of peptides, comprising more than 100,000 unique peptide sequences. The control of a patent-protected library comprising several distinct classes of peptides distinguishes us from our competitors, many of whom are attempting to develop only a single class of peptides for multiple applications. The breadth of our library offers us an exceptionally wide range of options in matching optimal peptides with individual product or therapeutic requirements.

With respect to proprietary know-how that is not patentable, we have chosen to rely on trade secret protection and confidentiality agreements to protect our interests. We have taken security measures to protect our proprietary know-how, technologies, and confidential data, and continue to explore further methods of protection. We require all employees, consultants, and collaborators to enter into confidentiality agreements, and employees and consultants enter into invention assignment agreements with us. We cannot assure you, however, that these agreements will provide meaningful protection or adequate remedies for any breach or that our proprietary information will not otherwise become known or be independently discovered by our competitors.

In the case of a strategic partnership or other collaborative arrangement which requires the sharing of data, our policy is to disclose to our partner, under controlled circumstances, only data that is relevant to the partnership or arrangement during the contractual term of the strategic partnership or collaborative arrangement, subject to a duty of confidentiality on the part of our partner or collaborator. Disputes may arise as to the ownership and corresponding rights to know-how and inventions resulting from research by us, and our corporate partners, licensors, scientific collaborators, and consultants. We cannot assure you that we will be able to maintain our proprietary position or that third parties will not circumvent any proprietary protection we have. Our failure to maintain exclusive or other rights to these technologies could harm our competitive position.

To continue developing and commercializing our current and future products, we may license intellectual property from commercial or academic entities to obtain the rights to technology that is required for our discovery, research, development, and commercialization activities.

**Regulation**

Federal, state and local governmental authorities in the United States and other countries regulate, among other things, the testing, production, distribution and sale of prescription and over-the-counter drugs and cosmetics. In the United States, the FDA, acting under the Food Drug and Cosmetic Act (FDCA) and other federal statutes and FDA regulations, regulates products primarily on the basis of their intended use, as determined by the labeling claims made for the product.

Although under our licensing strategy our collaborators will bear the majority of the regulatory compliance burden, our ability to successfully out-license and collaborate with others on our product candidates requires that we understand the regulations and restrictions on commercialization of cosmetic and drug products.

*FDA regulation of cosmetics*

The FDCA defines cosmetics as products and their components intended to be rubbed, poured, sprinkled, sprayed on, introduced into, or otherwise applied to the human body or any part thereof for cleansing, beautifying, promoting attractiveness, or altering the appearance. Cosmetic products are not subject to FDA pre-market approval authority, although the FDA can take enforcement action for marketed cosmetic products that are adulterated or misbranded, including violations of product safety requirements, use and quantity of ingredients, labeling and promotion and methods of manufacture. Additionally, the FDA monitors compliance of cosmetic products through random inspections of cosmetic manufacturers and distributors. The labeling of cosmetic products is subject to the requirements of the FDCA, the Fair Packaging and Labeling Act and other FDA regulations.

Our licensing strategy with cosmetics manufacturers requires that we operate within the confines of cosmetic intended uses when developing and partnering for the commercialization of relevant products.

*FDA regulation of drug products*

The FDCA defines drugs as products intended to cure, mitigate, treat or prevent a disease, or affect the structure or any function of the human body. In comparison to cosmetics, drug products are subject to more comprehensive safety and effectiveness requirements of the FDCA and its implementing regulations. The FDA and its counterparts in other countries extensively regulate the pre-clinical and clinical testing, approval, manufacturing, labeling, storage, record-keeping, reporting, advertising, promotion, import, export, marketing, and distribution, among other things, of drug products. If we or our collaborators do not comply with applicable requirements, we may be fined, our products may be recalled or seized, our clinical trials may be suspended or terminated, our production may be partially or totally suspended, the government may refuse to approve related marketing applications, and we may be subject to an injunction, and/or criminally prosecuted.

The steps required before a new drug may be marketed in the United States include (i) pre-clinical laboratory and animal testing, (ii) submission to the FDA of an Investigational New Drug, or IND, application which must become effective before clinical trials may commence, (iii) adequate and well-controlled clinical trials to establish the safety and efficacy of the drug, (iv) submission to the FDA of a New Drug Application, or NDA, and (v) FDA approval of the NDA prior to any commercial sale or shipment of the drug. Pre-clinical testing is generally conducted on laboratory animals to evaluate the potential safety and the efficacy of a drug. The results of these studies are submitted to the FDA as a part of an IND, which must be approved before clinical trials in humans can begin. Typically, clinical evaluation involves a time consuming and costly three-phase process. In Phase I, clinical trials are conducted with a small number of subjects to determine the early safety profile, the pattern of drug distribution and metabolism. In Phase II, clinical trials are conducted with groups of patients afflicted with a specific disease to determine preliminary efficacy, optimal dosages and expanded evidence of safety. In Phase III, large-scale, multi-center, comparative trials are conducted with patients afflicted with a target disease to provide sufficient data to demonstrate the efficacy and safety required by the FDA. The FDA closely monitors the progress of each of the three phases of clinical trials and may, at its discretion, re-evaluate, alter, suspend or terminate the testing based upon the data that have been accumulated to that point and its assessment of the risk/benefit ratio to the patient.

This testing, the preparation of necessary applications, the processing of those applications by the FDA, and potential review of the applications by an FDA advisory panel of outside experts are expensive and typically take many years to complete. The FDA may not act quickly or favorably in reviewing these applications, or may deny approval altogether, and we or our collaborators may encounter significant difficulties or costs in our efforts to obtain FDA approval.

We believe that certain of our lipohexapeptide product candidates for treatment of topical skin infections may require complete NDA preparation by ourselves and/or our collaborators, as may certain of our Over-the-Counter (OTC) drug product candidates. To date, we have not conducted human clinical trials of our lipohexapeptides.

*The OTC monograph system*

While FDA approval is generally required before a new drug product may be marketed in the U.S., many OTC drugs are exempt from the FDA's pre-marketing approval requirements. In 1972, the FDA instituted the ongoing OTC Drug Review to evaluate the safety and effectiveness of OTC drug ingredients in the market. Through this process, the FDA issues monographs for therapeutic product categories that set forth the specific active ingredients, dosages, strengths, indications for use, warnings and labeling statements for OTC drug ingredients that the FDA will consider generally recognized as safe and effective for OTC use and therefore not subject to pre-market approval.

For most categories of OTC drugs not yet subject to a final monograph, the FDA usually permits such drugs to continue to be marketed until a final monograph becomes effective, unless the drug will pose a potential health hazard to consumers.

Drugs subject to final monographs, as well as drugs that are subject only to proposed monographs, are subject to various FDA regulations concerning, for example, manufacturing in accordance with current Good Manufacturing Practices (cGMP), general and specific labeling requirements and prohibitions against promotion for conditions other than those stated in the labeling. Drug manufacturing facilities are subject to FDA inspection, and failure to comply with applicable regulatory requirements may lead to administrative or judicially imposed penalties.

Certain products containing our peptides may be regulated under the OTC monograph system by the FDA.

We are also subject to regulation by the Occupational Safety & Health Administration (OSHA), and the Environmental Protection Agency (EPA), and to various laws, and regulations relating to safe working conditions, laboratory, and manufacturing practices, and the use, and disposal of hazardous or potentially hazardous substances, including radioactive compounds used in connection with our research, and development activities, and we may in the future be subject to other federal, state or local laws or regulations. OSHA, EPA or other regulatory agencies may promulgate regulations that affect our research and development programs. We are also subject to regulation by the Department of Transportation, and to various laws and regulations relating to the shipping of cells, and other similar items. We are unable to predict whether any agency will adopt any regulation that could limit or impede our operations.

Depending on the circumstances, failure to meet these other applicable regulatory requirements can result in criminal prosecution, fines or other penalties, injunctions, recall or seizure of products, partial or total suspension of production, denial or withdrawal of pre-marketing product approval or refusal to allow us to enter into supply contracts, including government contracts.

To date, we have not incurred any substantial costs to comply with environmental laws or regulations.

Sales of cosmetics and drug products outside the United States are subject to foreign regulatory requirements that vary widely from country to country. Whether or not we or our collaborators have obtained FDA approval, we must obtain approval of a product by comparable regulatory authorities of foreign countries prior to the commencement of marketing the product in those countries. The time required to obtain these approvals may be longer or shorter than that required for FDA approval. The foreign regulatory approval process includes all the risks associated with FDA regulation set forth above, as well as country-specific regulations, including in some countries price controls.

**Research and Development Expenses**

During the years ended December 31, 2008 and 2007, our research and development expenses were approximately $827,400 and $782,100, respectively.

**Employees**

As of December 31, 2008, we employed six personnel, all on a full-time basis, including two employees in research and development, one employee in marketing and business development, and three employees in finance and administration. None of our employees is covered by a collective bargaining agreement. We have never experienced employment-related work stoppages and consider our employee relations to be positive.

**Available Information**

We make available on our website, free of charge, copies of our Annual Reports on Forms 10-K and 10-KSB, Quarterly Reports on Forms 10-Q and 10-QSB, 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, as soon as reasonably practicable after filing or furnishing the information to the SEC. The internet address for this information is www.helixbiomedix.com. The information posted on our website is not incorporated into this Annual Report. The SEC maintains an internet site that contains these reports at www.sec.gov.

**Executive Officers of the Registrant**

Our executive officers as of March 1, 2009 are as follows:

| Name | Age | Position |
|---|---|---|
| R. Stephen Beatty | 59 | President and Chief Executive Officer |
| Timothy J. Falla, Ph.D. | 43 | Vice President and Chief Scientific Officer |
| Robin L. Carmichael | 52 | Vice President, Marketing and Business Development |

*R. Stephen Beatty* has served as our President and Chief Executive Officer and as a member of our board of directors since May 1999. Prior to joining us, Mr. Beatty established and operated Beatty Finance, Inc., a private financial services company. Mr. Beatty is currently President and a director of Beatty Finance but does not have day-to-day responsibilities in those capacities. Mr. Beatty holds a B.S. in Mathematics from the University of South Alabama and an M.B.A. from the University of New Orleans.

*Timothy J. Falla, Ph.D.* has served as our Vice President and Chief Scientific Officer since June 2001. From 1998 until 2001, Dr. Falla was Principal Scientist with IntraBiotics Pharmaceuticals, Inc. where he led a multi-disciplinary scientific research team focused on antibacterial drug discovery and development. Dr. Falla holds a B.S. in Applied Biology from the University of Wales, and a Ph.D. in Molecular Biology and Infectious Disease from Oxford University and the University of Wales.

*Robin L. Carmichael* joined us in October 2007 and serves as our Vice President, Marketing and Business Development. From April 2007 to October 2007, Ms. Carmichael was the Chief Operating Officer of DERMAdoctor, Inc., a company specializing in developing and selling over-the-counter drugs and cosmeceuticals. Prior to joining DERMAdoctor, Inc., from 1998 to September 2006, Ms. Carmichael served as Vice President of Marketing first with ProCyte Corporation and then with Photomedex, Inc. following its acquisition of ProCyte in 2005 and as a consultant to the same company from January to June 2007. From 1993 to 1998, she held various marketing and clinical research positions of increasing responsibility with ProCyte. Ms. Carmichael holds a B.S. in Nursing from Seattle University and attended the UCLA Anderson Graduate School of Executive Management.

## ITEM 1A. *RISK FACTORS*

You should carefully consider the risks described below, together with all other information included in this Annual Report, in evaluating our company. If any of the following risks actually occur, our financial condition or operating results could be harmed. In such case, investors may lose part or all of their investment.

***We will need to raise additional capital to fund our operations and our failure to obtain funding when needed may force us to delay, reduce or eliminate our product development programs or collaboration efforts, or to discontinue our operations.***

Developing products and conducting pre-clinical and clinical testing of antimicrobial peptide technologies requires substantial amounts of capital. To date, we have raised capital primarily through private equity and convertible debt financings. If we are unable to timely obtain additional funding, we may never achieve the results necessary to be profitable. We will need to raise additional capital to, among other things:

- commercialize our peptide compounds and intermediates;
- commercialize skin care products containing our peptides;
- fund our pre-clinical studies;
- fund clinical trials;
- continue our research and development activities;
- finance our operating expenses; and
- prepare, file, prosecute, maintain, enforce, and defend patent and other proprietary rights.

We continue to explore potential sources of funding to support clinical development of certain of our pharmaceutical programs. Conducting clinical trials requires significant capital, and significantly more than we have historically raised to support our consumer programs. If we are unable to raise sufficient capital to fund clinical development, we may be required to rely on collaborations with pharmaceutical companies to advance these programs. However, there can be no assurance that any such collaboration would be available on favorable terms to us, if at all, or that if entered into, it would be successful.

Our net cash used in operations has exceeded our cash generated from operations for each year since our inception. For example, we used approximately $3.1 million in operating activities for the year ended December 31, 2008, and approximately $3.2 million in 2007. In the first quarter of 2009, we completed a convertible note and warrant offering in which we issued promissory notes in an aggregate principal amount of approximately $3.47 million and warrants to purchase an aggregate of 868,500 shares of our common stock at an exercise price of $1.00 per share (see Note 17 of our Notes to Financial Statements). After giving effect to this note and warrant offering, we believe that, based upon the current status of our operations, consumer product commercialization development and collaboration plans, our cash and cash equivalents should be adequate to satisfy our capital needs through at least the next twelve months. However, our future funding requirements will depend on many factors, including, among other things:

- our ability to enter into revenue-producing agreements and the success of our existing agreements;
- the progress, expansion, and cost of our pre-clinical and research and development activities;
- any future decisions we may make about the scope and prioritization of the programs we pursue, including whether we pursue clinical development of our pharmaceutical programs;
- the development of new product candidates or uses for our antimicrobial peptide technologies;
- changes in regulatory policies or laws that affect our operations; and
- competing technological and market developments.

If adequate funds are not available to us, we may have to license to other companies our products or technologies that we would prefer to develop and commercialize ourselves or we may have to liquidate some or all of our assets, delay, reduce the scope of or eliminate some portion or all of our development programs or wind down our business.

If we raise additional funds by issuing convertible debt securities, new investors may have rights superior to holders of our currently issued and outstanding common stock or convertible notes payable. In addition, debt financing, if available, may include restrictive covenants.

***We expect to continue to incur substantial losses and we may never achieve profitability.***

We have incurred significant operating losses since we began operations in November 1988, including a net loss of approximately $4.5 million for the year ended December 31, 2008, and we had an accumulated deficit of approximately $32.1 million as of such date. These losses have resulted principally from costs incurred in our research and development programs and from our general and administrative expenses. If the necessary capital is available to us, we intend to make substantial expenditures to further develop and commercialize our product candidates and expect that our rate of spending may accelerate as the result of the increased costs and expenses associated with expanded in-house research and development of our lead product candidates, out-licensing initiatives, clinical trials, regulatory approvals and commercialization of our antimicrobial peptide technologies. Because of the numerous risks and uncertainties associated with our product development efforts, we are unable to predict when we may become profitable, and we may never become profitable. If we are unable to achieve and then maintain profitability, the market value of our common stock will likely decline.

***Although we are no longer a development stage company, there can be no assurance that we will be able to continue to commercialize our technology.***

Effective during the third quarter of 2007, we no longer characterize ourselves as, or present our financial statements as those of, a development stage company. However, there can be no assurance that we will be able to continue to commercialize our technology, that any such commercialization will generate significant future revenue, or that we will attain profitability. If we are unable to continue to commercialize our technology, our business, operating results and financial condition will be materially adversely affected.

***The general economic downturn and its effects on our customers may adversely affect our sales, financial condition and growth prospects.***

A downturn in the markets or geographic areas in which our peptides and proprietary branded products are sold could adversely affect our results of operations and growth prospects. Recent economic events in the United States and elsewhere, including job losses, the tightening of credit markets and failures of financial institutions and other entities, have resulted in a heightened concern regarding further deterioration globally. Unfavorable economic conditions may adversely affect our licensees' and other customers' business levels and lead to reduced orders to us, payment delays, uncollectible accounts receivable or other negative trends.

In addition, the final consumer products incorporating our peptides may be considered discretionary items for consumers. Factors affecting the level of consumer spending for discretionary items include general economic conditions, the availability of consumer credit and consumer confidence in future economic conditions. Consumer purchases of discretionary items tend to decline during recessionary periods when disposable income is lower, and the downturn in economic conditions may thus reduce sales of the final products incorporating our peptides or limit their growth prospects, either of which would harm our business.

***Because of the specialized nature of our business, the termination of relationships with key management and scientific personnel or the inability to recruit and retain additional personnel could prevent us from developing our technologies and obtaining financing.***

The competition for qualified personnel in the biotechnology field is intense, and we rely heavily on our ability to attract and retain qualified scientific, technical, and managerial personnel. We are highly dependent upon R. Stephen Beatty, our President and Chief Executive Officer, Dr. Timothy Falla, our Vice President and

Chief Scientific Officer, and Robin L. Carmichael, our vice President of Marketing and Business Development. Further, in order to commercialize our products successfully, we will be required to expand our workforce, particularly in the areas of research and development, sales and marketing. These activities will require the addition of new personnel, including management, and the development of additional expertise by existing management personnel. If we are unable to successfully manage this growth or if we lose key personnel, our business will be adversely affected.

***We face substantial competition in our product development efforts from personal care, pharmaceutical and biotechnology companies, as well as universities and other not-for-profit institutions.***

We face significant competition in our attempts to develop applications of our peptide technology from entities that have substantially greater research and product development capabilities and financial, scientific, marketing, and human resources. These entities include cosmetic, pharmaceutical and biotechnology companies, as well as universities and other not-for-profit institutions. We expect that competition in the development of products analogous to our peptide technology will intensify. Our competitors may succeed in developing products, entering into successful collaborations or obtaining approvals from the FDA or other regulatory agencies for such products before we do, or in developing products that are less expensive, safer or more effective than those we develop or propose to develop. The success of any one competitor in these or other respects will have a material adverse effect on our business, operating results, and financial condition.

***To the extent our cash deposits are maintained in accounts that are not insured, such assets could be at risk.***

As of December 31, 2008, we maintained approximately $2.0 million, including funds classified as restricted cash, at major financial institutions in money market accounts insured by the Securities Investor Protection Corporation (SIPC) up to $500,000 per account. The protection afforded by the SIPC is narrower than that afforded by the Federal Deposit Insurance Corporation with respect to bank deposits and does not cover all losses. If the financial institutions holding our cash deposits experience financial difficulty or failure, the assets in these accounts would be at risk, and their loss would have an adverse effect on our business and results of operations.

***We rely on collaborators for a substantial portion of the research and development and product commercialization activities relating to our technologies and may need to enter into further collaborations to develop, test and produce commercially viable products. If our collaborators do not perform as expected, or we are unable to enter into further collaborations, our ability to commercialize our products and product candidates would be adversely affected.***

Part of our strategy to date has been to enhance our development programs and fund our capital requirements in part by entering into collaborative agreements with cosmetic, pharmaceutical, and other biotechnology companies, and we may in the future pursue further collaborations. The development of commercially viable products from our technology will likely continue to require the technical collaboration and financial assistance of other, significantly larger third parties to bear some or most of the costs of pre-clinical and clinical testing, regulatory approval, manufacturing and marketing prior to commercial sale. This is especially true of our pharmaceutical programs, as to which we expect clinical testing and the regulatory approval process, among other things, to require substantial financial and other resources, and for which we may seek collaborative assistance.

There can be no assurance that we will succeed in attracting collaborative partners who can assist in the further development and commercialization of our technology, and we may lack the capital and other resources necessary to develop our product candidates in the absence of these collaborations. In addition, any collaboration that we enter into may be unsuccessful in the development and commercialization of our product candidates. When we partner with a third party for development and commercialization of a product candidate, we have in the past and can expect in the future to relinquish some or all of the control over the future success of that product candidate to the collaborator. Existing and potential future collaborators may not devote sufficient resources to the research, development and commercialization of our product candidates, or they may breach or

terminate our agreements with them. In addition, the current general economic downturn may adversely impact the ability or willingness of our collaborators to devote such resources to the success of our product candidates. If existing or future collaborations are unsuccessful, our business, operating results and financial condition would be impaired.

***We face risks of product liability and other claims against us and may not be able to obtain adequate insurance to protect against losses.***

The current use of any of our products, including in pre-clinical trials, and the sale of any of our products expose us to liability claims. These claims might be made directly by consumers or our corporate collaborators or others selling such products. We may experience financial losses in the future due to product liability or other claims. Our insurance includes coverage for the sale of commercial products. However, we may be unable to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect against losses. If a successful product liability or other claim or a series of claims is brought against us for uninsured liabilities or in excess of insured liabilities, our assets may be insufficient to cover such claims and our business operations could be impaired.

***If we are unable to protect our proprietary rights, we may not be able to compete effectively.***

Our success depends in part on obtaining, maintaining, and enforcing our patents and other proprietary rights. We believe we own, or have rights under licenses to, issued patents and pending patent applications that are necessary to commercialize our antimicrobial peptides. However, the patents on which we rely may be challenged and invalidated, and our patent applications may not result in issued patents. Moreover, our patents and patent applications may not be sufficiently broad to prevent others from practicing our technologies or developing competing products. We also face the risk that others may independently develop similar or alternative technologies or may design around our proprietary and patented technologies.

The patent positions of pharmaceutical and biotechnology companies can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. No consistent policy regarding the breadth of claims allowed in biotechnology patents has emerged to date in the United States. Furthermore, the application, and enforcement of patent laws and regulations in foreign countries is even more uncertain. Accordingly, we cannot assure you that we will be able to effectively protect or defend our proprietary rights in the United States or in foreign jurisdictions on a consistent basis.

Third parties may successfully challenge the validity of our patents. We will only be able to protect our technology from unauthorized use by third parties to the extent that valid and enforceable patents or other proprietary rights cover them. Because the issuance of a patent is not conclusive of its validity or enforceability, we cannot assure you how much protection, if any, will be given to our patents if we attempt to enforce them or if others challenge their validity in court. It is possible that a competitor may successfully challenge our patents or that a challenge will result in limiting the coverage of our patents. If the outcome of litigation is adverse to us, third parties may be able to use our technology without payment to us.

In addition, it is possible that competitors may infringe upon our patents or successfully avoid them through design innovation. We may initiate litigation to police unauthorized use of our proprietary rights. However, the cost of litigation to uphold the validity of our patents and to prevent infringement could be substantial, and the litigation will consume time and other resources. Some of our competitors may be better able to sustain the costs of complex patent litigation because they have substantially greater resources. Moreover, if a court decides that our patents are not valid, we will not have the right to stop others from using our technology. There is also the risk that, even if the validity of our patents were upheld, a court may refuse to stop others on the ground that their activities do not infringe upon our patents. Because protecting our intellectual property is difficult and expensive, we may be unable to prevent misappropriation of our proprietary rights.

We also rely on certain proprietary trade secrets and know-how, especially where we believe patent protection is not appropriate or obtainable. Trade secrets and know-how, however, are difficult to protect. We have taken measures to protect our unpatented trade secrets and know-how, including the use of confidentiality

and invention assignment agreements with our employees, consultants and contractors. It is possible, however, that these persons may unintentionally or willingly breach the agreements or that our competitors may independently develop or otherwise discover our trade secrets and know-how.

***If the use of our technology conflicts with the rights of others, we could be subject to costly litigation or other proceedings, and an adverse outcome could have a significant adverse effect on our business.***

Our competitors or others may have or acquire patent rights that they could enforce against us. If they do so, we may be required to alter our peptide technology, pay licensing fees or cease operations. If our peptide technology conflicts with patent rights of others, third parties could bring legal action against us or our licensees, suppliers, customers or potential collaborators, claiming damages and seeking to enjoin manufacturing and marketing of the affected products. If these legal actions are successful, in addition to any potential liability for damages, we might have to alter our affected products or underlying technology such that they do not infringe upon others' patent rights, or obtain a license in order to continue to manufacture or market the affected products. However, modifying our products or technology may not be possible or could require substantial funds or time, and a required license under the related patent may not be available on acceptable terms, if at all.

We may be unaware that the use of our technology conflicts with pending or issued patents. Because patent applications can take many years to issue, there may be currently pending applications, unknown to us, that may later result in issued patents upon which our peptide technology may infringe. There could also be existing patents of which we are unaware upon which our peptide technology may infringe. In addition, if third parties file patent applications or obtain patents claiming technology also claimed by us in pending applications, we may have to participate in interference proceedings in the U.S. Patent and Trademark Office to determine priority of invention. If third parties file oppositions in foreign countries, we may also have to participate in opposition proceedings in foreign tribunals to defend the patentability of the filed foreign patent applications. We may have to participate in interference proceedings involving our issued patents or our pending applications.

***Our rights to use peptides and technologies licensed to us by third parties are not within our control, and we may not be able to implement our peptide technology without these peptides and technologies.***

We have licensed patents and other rights which are necessary to our peptide technology. Our business will significantly suffer if these licenses terminate, if the licensors fail to abide by the terms of the licenses or fail to prevent infringement by third parties or if the licensed patents or other rights are found to be invalid. We have in-licensed several peptide patents and patent applications from the University of British Columbia. These licenses terminate upon the expiration of the last licensed patent and may also be terminated in the event of a material breach.

If we violate the terms of our licenses or otherwise lose our rights to these peptides, patents or patent applications, we may be unable to continue development of our peptide technology. Our licensors or others may dispute the scope of our rights under any of these licenses. Additionally, the licensors under these licenses might breach the terms of their respective agreements or fail to prevent infringement of the licensed patents by third parties. Loss of any of these licenses for any reason could materially harm our financial condition and operating results.

***Our principal stockholders, executive officers and directors may have the ability to control our management and operations and could act in their own best interests and not necessarily in the best interests of other stockholders.***

Our executive officers, directors, principal stockholders, and entities affiliated with them beneficially own in the aggregate approximately 43.5% of our outstanding common stock and common stock equivalents as of March 19, 2009. In addition, Frank T. Nickell, who beneficially owned approximately 29.5% of our outstanding common stock as of March 19, 2009, also beneficially holds convertible promissory notes in an aggregate principal amount of $5.0 million and warrants to purchase an aggregate of 1,250,000 shares of our common stock, the conversion and/or exercise of which could result in the beneficial ownership by Mr. Nickell of a majority of the outstanding shares of our common stock. This significant concentration of share ownership may

adversely affect the trading price for our common stock because investors often perceive disadvantages in owning stock in companies with controlling stockholders. These stockholders have the ability to exert substantial influence over all matters requiring approval by our stockholders, including the election and removal of directors and any proposed merger, consolidation or sale of all or substantially all of our assets. In addition, they could dictate the management of our business and affairs.

This concentration of ownership could have the effect of delaying, deferring or preventing a change in control or impeding a merger or consolidation, takeover or other business combination that could be favorable to you.

***Future sales of our common stock could negatively affect our stock price and may cause dilution to existing stockholders.***

Our common stock has generally been thinly traded, meaning that the numbers of persons interested in purchasing our common stock at or near ask prices at any given time may be relatively small or nonexistent. As a consequence, there may be periods of several days or more when trading activity in our shares is minimal or nonexistent, as compared to an issuer with a large and steady volume of trading activity that will generally support continuous sales without a considerable adverse effect on share price. If our common stockholders sell substantial amounts of common stock in the public market, or the market perceives that such sales may occur, the market price of our common stock could decline significantly.

If we raise additional funds by issuing equity or convertible debt securities, our stock price may decline and our existing stockholders may experience significant dilution. In addition, we have issued a significant amount of convertible securities, and we will need to raise substantial additional capital in the future to fund our operations. The conversion and exercise of our outstanding convertible promissory notes and warrants, respectively, could be dilutive, resulting in the potential issuance of a significant number of additional shares of our common stock.

***Our common stock may experience extreme price and volume fluctuations, which could lead to costly litigation for us and make an investment in us less appealing.***

The market price of our common stock has and may continue to fluctuate significantly due to a variety of factors, including:

- announcements about our collaborators or licensees;
- announcements about technological innovations or new products or services by us or our competitors;
- announcements concerning our competitors or the biotechnology industry in general;
- new regulatory pronouncements and changes in regulatory guidelines;
- general and industry-specific economic conditions;
- additions or departures of our key personnel;
- changes in financial estimates or recommendations by securities analysts;
- variations in our quarterly results; and
- changes in accounting principles.

The market prices of the securities of many biotechnology companies have been highly volatile and may remain highly volatile in the future. This volatility has often been unrelated to the operating performance of particular companies. In the past, companies that experience volatility in the market price of their securities have often faced class action securities litigation. Moreover, market prices for stocks of biotechnology and other technology companies frequently reach levels that bear no relationship to the operating performance of these companies. These market prices generally are not sustainable and are highly volatile. Whether or not meritorious, litigation brought against us could result in substantial costs, divert our management's attention, and harm our financial condition and results of operations.

***Our certificate of incorporation, bylaws, and stockholder rights agreement may delay or prevent a change in our management.***

Our amended and restated certificate of incorporation, bylaws, and stockholder rights agreement contain provisions that could delay or prevent a change in our board of directors and management teams. Some of these provisions:

- authorize the issuance of preferred stock that can be created and issued by the board of directors without prior stockholder approval, commonly referred to as "blank check" preferred stock, with rights senior to those of our common stock;
- authorize our board of directors to issue dilutive shares of common stock upon certain events; and
- provide for a classified board of directors.

These provisions could make it more difficult for common stockholders to replace members of the board of directors. Because our board of directors is responsible for appointing the members of our management team, these provisions could in turn affect any attempt to replace the current management team.

## ITEM 2. *PROPERTIES*

We currently lease approximately 5,300 square feet of laboratory and office space in Bothell, Washington. The lease expires in November 2009 and includes an option to extend the term of the lease for three years.

## PART II

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

Our common stock has been quoted on the OTC Bulletin Board under the symbol "HXBM" since 1999. Prior to that date, our common stock did not trade publicly. The following table summarizes our common stock's high and low daily closing sales prices for the periods indicated as reported by the OTC Bulletin Board. These quotations reflect inter-dealer prices, without retail markups, markdowns or commissions, and may not represent actual transactions.

| | Year Ended December 31, | | | |
|---|---|---|---|---|
| | 2008 | | 2007 | |
| | High | Low | High | Low |
| First Quarter | $0.80 | $0.46 | $0.98 | $0.70 |
| Second Quarter | $0.80 | $0.48 | $1.10 | $0.70 |
| Third Quarter | $0.60 | $0.38 | $1.01 | $0.62 |
| Fourth Quarter | $0.58 | $0.26 | $0.93 | $0.50 |

As of February 28, 2009, we had 831 holders of record and 1,272 beneficial stockholders of our common stock. Because in some instances our common shares are held by brokers and clearing agencies on behalf of stockholders, we are unable to determine the total number of stockholders represented by these record holders.

#### Dividends

We have never declared or paid cash dividends on our capital stock. We intend to retain any future earnings to fund the development and growth of our business, and do not anticipate paying any cash dividends in the foreseeable future. Any future determination relating to our dividend policy will be made by our board of directors.

### ITEM 6. *SELECTED FINANCIAL DATA*

*The following selected financial data have been derived from our financial statements. These data should be read in conjunction with the financial statements and notes thereto and with Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations."*

| | Year Ended December 31, | | | | |
|---|---|---|---|---|---|
| | 2008 | 2007 | 2006 | 2005 | 2004 |
| Operations: | | | | | |
| Revenue | $ 562,877 | $ 463,941 | $ 70,940 | $ 108,408 | $ 93,661 |
| Net loss(1) | (4,515,512) | (3,434,004) | (3,828,326) | (3,277,239) | (3,109,274) |
| Net loss per share, basic and diluted(1) | (0.18) | (0.14) | (0.17) | (0.18) | (0.23) |
| Financial position: | | | | | |
| Cash, cash equivalents and marketable securities | 984,844 | 1,161,290 | 2,256,901 | 2,827,959 | 1,908,028 |
| Working capital | 1,014,268 | 1,105,405 | 2,087,776 | 2,759,267 | 1,821,253 |
| Total assets | 2,703,707 | 2,022,071 | 3,060,544 | 3,741,940 | 2,867,080 |
| Stockholders' equity (deficit) | (1,714,522) | 1,670,713 | 2,798,077 | 3,517,581 | 2,679,034 |

(1) In each of the years ended December 31, 2008, 2007 and 2006, net loss and net loss per share reflect the impact of SFAS 123R stock-based compensation charges which were not present in the year ended December 31, 2005 and prior thereto.

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

For a discussion of forward-looking statements and important factors that could cause results to differ materially from the forward-looking statements in this Annual Report, see Part I, "Forward-Looking Statements," and Item 1A, "Risk Factors."

### Business Overview

Our mission is to enrich clinical practice and the patient/consumer experience by developing and commercializing topically applied products which offer the benefits of our advanced bioactive small molecule peptide technology. Our vision is to be recognized as the world leader in the identification, qualification and commercialization of natural and synthetic peptides. We have a proprietary library containing a broad array of these synthetic bioactive peptides. Our business strategy is to develop and out-license to third parties the rights to use these proprietary peptides in diverse fields of application and to commercialize our own branded products. We have developed numerous peptides with unique sequences in the following two broad areas of application:

- Consumer (skin care) — we have developed a number of peptides capable of stimulating certain aspects of the skin's innate ability to regenerate and are marketing these peptides as innovative ingredients for cosmetic use.
- Pharmaceutical — certain of our peptides have demonstrated promising results in the areas of topical anti-infectives and wound healing and are being developed for Rx applications.

Our objective is also to increase our focus on our pharmaceutical programs and initiate clinical development of our lead drug candidates. Due to the pre-clinical stage of development of each of our peptide sequences in our pharmaceutical programs, we are unable to estimate the total costs and timing to complete development, and we do not separately track these costs due to the cost burden associated with accounting at such levels of detail and our limited resources. However, the majority of our research and development spending is on the two areas of application discussed above. Further development of our pharmaceutical programs will require additional funding to support these programs.

### Critical Accounting Policies and Estimates

The preparation of our financial statements requires us to make estimates and assumptions that affect the reported amounts of liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. On an ongoing basis, our management evaluates its estimates and judgments, including those related to revenue recognition, research and development costs, capitalized patent costs and valuation of stock options and warrants. We base our estimates and judgments on historical experience and on various other factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions.

***Revenue Recognition***. We derive our revenue from technology licenses, joint development agreements, sales of consumer products and peptides, and administrative services provided to a related party. Revenue under technology licenses may include up-front payments and royalties from third-party product manufacturing and sales. Revenue associated with joint development agreements primarily consists of payments for completion of development milestones. For agreements with multiple elements, we follow Emerging Issues Task Force (EITF) Issue No. 00-21, *Revenue Arrangements with Multiple Deliverables*, to determine whether each element can be separated into a unit of accounting based on the following criteria: (1) the delivered items have value to the customer on a stand-alone basis; (2) any undelivered items have objective and reliable evidence of fair value; and, (3) delivery or performance of the undelivered items that have a right of return is probable and within our control. If there is objective and reliable evidence of fair value for all units of accounting in an arrangement, we allocate revenue among the separate units of accounting based on their estimated fair values. If the criteria are not met, elements included in an arrangement are accounted for as a single unit of accounting and revenue is deferred until the period in which the final deliverable is provided. When the period of deferral cannot be

specifically identified from the agreement, we estimate the period based upon other factors contained within the agreement. Our management continually reviews these estimates, which could result in a change in the deferral period and the timing and the amount of revenue recognized.

- *Licensing Fees.* We recognize up-front payments when persuasive evidence of an agreement exists, delivery has occurred or services have been performed, the price is fixed and determinable and collection is reasonably assured. We recognize royalty revenue in the period the royalty is earned based on reports received from licensees or other information available through the date of issuance of the financial statements. We must occasionally make estimates on certain royalty revenue amounts due to the timing of securing information from our customers. While we believe we can make reliable estimates for certain royalty revenue, these estimates are inherently subjective. Accordingly, our estimates of royalty revenue could differ from actual events, thus impacting our financial position and results of operations.
- *Development Fees.* We record revenue associated with performance milestones as earned when we have completed the specific milestones as defined in the joint development agreements and there are no uncertainties or contingencies regarding collection of the related payment. Payments received for which the earnings process is not complete are recorded as deferred revenue.
- *Consumer Product Sales and Peptide Sales.* We recognize revenue from sales of our skin care products and peptides when persuasive evidence of an arrangement exists, delivery has occurred, the price is fixed or determinable and collection is reasonably assured. In the future, peptide sales may be transacted directly between the licensees and a third-party manufacturer, which could have an adverse effect on our revenue.
- *Administrative Services Revenue, Related Party.* Administrative services revenue consists of fees received from DermaVentures, LLC (DermaVentures), a related party, for marketing campaign costs associated with DermaVentures' product line and other out-of-pocket expenses we incur on DermaVentures' behalf. Administrative services revenue is invoiced to DermaVentures at or near cost and is recorded as earned when services have been rendered, no obligations remain outstanding and collection is reasonably assured. In accordance with EITF Issue No. 99-19, *Reporting Revenue Gross as a Principal versus Net as an Agent*, and EITF Issue No. 01-14, *Income Statement Characterization of Reimbursements Received for 'Out-of-Pocket' Expenses Incurred*, fees received from DermaVentures are reported as administrative services revenue, while related costs are included in cost of revenue in the statements of operations.

***Marketable Securities***. Marketable securities are reported at estimated fair value with the related unrealized gains and losses included as a component of accumulated other comprehensive income (loss) in stockholders' equity. Realized gains, losses, and declines in value of securities judged to be other than temporary are included in other non-operating income (expense). We estimate fair value based on valuation techniques defined by Statement of Financial Accounting Standards (SFAS) No. 157, *Fair Value Measurements* (SFAS 157), including using observable inputs such as quoted prices in active market for identical or similar investments. When observable inputs are not sufficiently available, we estimate fair value by incorporating assumptions that market participants would use in their estimates of fair value, which may include credit quality, estimates on the probability of the securities being called prior to final maturity and the liquidity of the securities. At December 31, 2008, we did not have any marketable securities.

***Research and Development Costs***. Our research and development costs are expensed as incurred. Research and development expenses include, but are not limited to, payroll and benefit expenses, lab supplies and expenses, and external trials and studies. In instances where we enter into agreements with third parties for research and development activities, which may include personnel costs, supplies and other costs associated with such collaborative agreements, we expense these items as incurred.

***Capitalization of Patent Costs***. We capitalize the third-party costs associated with patents that have been issued. Our policy for the capitalization of patent costs is to begin amortization of these costs at the time they are incurred. We periodically review our patent portfolio to determine whether any such costs have been impaired and are no longer being used in our research and development activities. To the extent we no longer use certain patents, the associated costs will be written off at that time.

***Valuation of Stock Options Granted to Employees, Officers and Non-Employee Directors for Board Service.*** The fair value of each option granted to employees, officers and non-employee directors for board service is estimated on the date of grant using the Black-Scholes option valuation model. The assumptions used to calculate the fair value of options granted are evaluated and revised, as necessary, to reflect market conditions and our experience. Options granted are valued using the single option valuation approach, and the resulting expense is recognized using the cliff, straight-line attribution method, consistent with the single option valuation approach. Compensation expense is recognized only for those options expected to vest.

***Valuation of Warrants and Non-Employee Stock Options.*** We account for our warrants and non-employee stock options in accordance with the provisions of SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities* (SFAS 133), EITF No. 00-19, *Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock* (EITF 00-19), and EITF No. 96-18, *Accounting for Equity Instruments that Are Issued to Other Than Employees for Acquiring, or in Conjunction With Selling, Goods or Services* (EITF 96-18), which require these instruments to be classified as permanent equity, temporary equity or as assets or liabilities. In general, warrants and non-employee stock options that either require net-cash settlement or are presumed to require net-cash settlement are recorded as assets and liabilities at fair value, and warrants that require settlement in shares are recorded as equity instruments.

We estimate the fair value of these derivative liabilities and equity instruments using a Black-Scholes model and use estimates for an expected dividend yield, a risk-free interest rate, and expected volatility. At each reporting period, as long as the derivative liabilities were outstanding and there was a potential for an insufficient number of authorized shares available to settle these instruments, they were revalued and any difference from the previous valuation date would be recognized as a change in fair value in our statement of operations.

***Valuation of Conversion Features Related to Convertible Note Payable, Related Party.*** In accordance with SFAS 133, we were required to separately account for the fair value of our right to automatically convert the note payable to a related party to equity pursuant to the terms of the convertible note payable issued on February 14, 2008 (See Note 2 of our Notes to Financial Statements). We estimated the fair value of this right using a Black-Scholes model and used estimates for an expected dividend yield, a risk-free interest rate, and expected asset-based volatility, together with management's estimate of the probability of exercise of the put options.

On June 27, 2008, we entered into an amendment to the convertible note payable which effectively extinguished the original note payable, including its embedded derivative instruments. The June 27, 2008 fair value of the separately-accounted-for embedded derivative instruments was credited to additional paid-in capital as part of recording the capital transaction resulting from the extinguishment of the original note payable.

***Valuation of Call Option Related to Convertible Note Payable, Related Party.*** The convertible note payable issued on February 14, 2008 and subsequently amended on June 27, 2008 includes a call option which gives the holder the right to demand repayment in the case of default. Under the guidance of SFAS 133, we are required to separately account for the fair value of the call option. We determined that the call option had no value at February 14, 2008 and at each reporting date since then, based on an analysis of the right and the likelihood of its exercise.

***Valuation of Prepayment Right Related to Convertible Note Payable, Related Party.*** The convertible note payable issued on February 14, 2008 and subsequently amended on June 27, 2008 allows us to prepay the unpaid balance of the convertible note and accrued interest at any time and without penalty. Under the guidance of SFAS 133, we are required to separately account for the fair value of this prepayment right. We determined that this prepayment right had no value at February 14, 2008 and at each reporting date since then, based on an analysis of the right and the likelihood of its exercise.

**Reclassifications**

Reclassifications of prior years' balances have been made to conform to the current format. Specifically, in the Statements of Operations, costs of revenue have been moved from operating expenses and presented separately in the Cost of Revenue section. This reclassification had no impact on the financial results in the periods presented.

**Results of Operations**

For the year ended December 31, 2008, total revenue was approximately $562,900, reflecting an increase of 21.3% compared to total revenue for the year ended December 31, 2007. Our 2008 revenue included approximately $42,300 of administrative services revenue we received from DermaVentures, a related party, for marketing campaign and support costs associated with DermaVentures' product line. Administrative services revenue was invoiced at or near cost and therefore did not have a material impact on our net loss for the year. In the fourth quarter of 2008, we introduced our first proprietary-branded consumer products to the skin care market in the United States. The initial sales of this product line accounted for $12,000, or 2.1%, of our 2008 revenue.

Our net loss for 2008 was approximately $4.5 million, or $0.18 per share, compared to a net loss of approximately $3.4 million, or $0.14 per share, for 2007, and a net loss of approximately $3.8 million, or $0.17 per share, for 2006. The increase of approximately $1.1 million in net loss in 2008 from 2007 was principally attributable to the interest expense and accretion of discount related to the convertible note payable issued to a related party in February 2008 and amended in June 2008. The decrease in net loss in 2007 compared to 2006 was primarily due to increased revenue from peptide sales, licensing fees and development fees recognized in 2007, partially offset by a slight increase in total operating expenses. As of December 31, 2008, our accumulated deficit was approximately $32.1 million. We may continue to incur substantial operating losses over the next several years, due principally to the estimated costs associated with our current level of operations, continued commercialization of our technology, and initiation of our pharmaceutical programs being greater than our anticipated revenues.

We expect to launch another proprietary-branded product line in the international market in the first half of 2009. Our ability to achieve a consistent level of revenue depends largely on our ability to continue to successfully commercialize our proprietary technology through royalty-bearing licenses, as well as developing and selling products via collaborations with strategic partners. Even if we are successful in the aforementioned activities, our operations may not be profitable. In addition, any payments under licensing arrangements are subject to significant fluctuations in both timing and amount. Therefore, our operating results for any period may fluctuate significantly and may not be comparable to the operating results for any other period.

***Revenue***

Revenue for the years ended December 31, 2008, 2007 and 2006 consisted of license and development fees, sales of consumer products and peptides, and administrative services revenue as summarized in the table below.

| | Year Ended December 31, 2008 | % Change 2008 to 2007 | Year Ended December 31, 2007 | % Change 2007 to 2006 | Year Ended December 31, 2006 |
|---|---|---|---|---|---|
| License and development fees | $319,152 | 65.0% | $193,381 | 396.6% | $38,940 |
| Percentage of total revenue | 56.7% | | 41.7% | | 54.9% |
| Peptide sales | 189,450 | (8.1)% | 206,160 | 544.3% | 32,000 |
| Percentage of total revenue | 33.7% | | 44.4% | | 45.1% |
| Peptide sales, related party | — | * | 64,400 | * | — |
| Percentage of total revenue | — | | 13.9% | | — |
| Consumer products sales | 12,000 | * | — | * | — |
| Percentage of total revenue | 2.1% | | — | | — |
| Administrative services revenue, related party | 42,275 | * | — | * | — |
| Percentage of total revenue | 7.5% | | — | | — |
| Total revenue | $562,877 | 21.3% | $463,941 | 554.0% | $70,940 |

* Percentage not meaningful

Total revenue increased by approximately $98,900, or 21.3%, to $562,877 in 2008 from $463,941 in 2007 and by approximately $393,000 in 2007, or 554.0%, from $70,940 in 2006. Excluding administrative services revenue from a related party, our 2008 revenue increased by approximately $56,700, or 12.2%, compared to 2007. The

increase in revenue in 2008 compared to 2007 was due primarily to increases in royalty revenue from our licensees, development fees and sales of consumer products, partially offset by a decrease in sales of peptides.

License and development fees increased by approximately $125,800, or 65.0%, to $319,152 in 2008 from $193,381 in 2007 and by approximately $154,400 in 2007, or 396.6%, from $38,940 in 2006. The increase in 2008 compared to 2007 was principally due to increases of approximately $71,800, or 66.8%, in royalty revenue and $54,000, or 62.8%, in development fees. The increase in 2007 compared to 2006 was primarily due to increases of approximately $98,400, or 1101.1%, in royalty revenue and $56,000, or 186.7%, in development fees. The growth in royalty revenue in 2008 and 2007 was attributable to an increased level of product manufacturing and sales from our licensees. The increase in development fees in 2008 and 2007 was derived from new collaborative agreements we entered into during those periods and to the timing of the achievement of certain milestones under applicable development agreements.

In the fourth quarter of 2008, we launched our first product line in the skin care area and began selling through domestic distribution channels. Sales of these consumer products were $12,000, or 2.1%, of total revenue in 2008.

Sales of peptides to third parties decreased by approximately $16,700, or 8.1%, to $189,450 in 2008 from $206,160 in 2007 and increased by approximately $174,200 in 2007, or 544.3%, from $32,000 in 2006. In 2007, peptide sales to a related party totaled $64,400. We had no peptide sales to this related party in 2008 or 2006. Fluctuations in peptide sales were primarily attributable to the product manufacturing cycles of our customers.

Administrative services revenue from DermaVentures in 2008 was $42,275, primarily consisting of billed marketing services related to DermaVentures' product line. Administrative services revenue from DermaVentures in 2007 was not material. We did not have administrative services revenue in 2006.

***Cost of Revenue and Gross Margin***

Cost of revenue consists of (1) cost of peptides sold, (2) cost of administrative services revenue from DermaVentures, a related party, which includes primarily marketing campaign costs associated with DermaVentures' product line and other out-of-pocket expenses we incur on DermaVentures' behalf, and (3) other cost of revenue, which includes cost of materials associated with consumer products and development activities as well as professional fees incurred related to development agreements. Gross profit is the difference between revenue and cost of revenue, and gross margin is gross profit expressed as a percentage of total revenue. Revenue mix affects our gross margin because our margins from license and development fees are higher than our margins from peptide sales and administrative services revenue.

Cost of revenue and gross margin for the years ended December 31, 2008, 2007 and 2006 are summarized in the table below.

| | Year Ended December 31, 2008(1) | % Change 2008 to 2007 | Year Ended December 31, 2007 | % Change 2007 to 2006 | Year Ended December 31, 2006 |
|---|---|---|---|---|---|
| Cost of peptides | $164,034 | 38.9% | $118,096 | (27.5)% | $162,991 |
| Percentage of total revenue | 29.1% | | 25.5% | | 229.8% |
| Percentage of related revenue | 86.6% | | 43.6% | | 509.3% |
| Cost of administrative services revenue, related party | $ 42,105 | * | — | — | — |
| Percentage of total revenue | 7.5% | | — | | — |
| Percentage of related revenue | 99.6% | | — | | — |
| Other cost of revenue | $ 49,237 | 141.4% | $ 20,396 | * | — |
| Percentage of total revenue | 8.7% | | 4.4% | | — |
| Percentage of related revenue | 14.9% | | 10.5% | | — |
| Total cost of revenue | $255,376 | 84.4% | $138,492 | (15.0)% | $162,991 |
| Percentage of total revenue | 45.4% | | 29.9% | | 229.8% |
| Gross profit (loss) | $307,501 | (5.5)% | $325,449 | 453.6% | $ (92,051) |
| Gross margin | 54.6% | | 70.1% | | (129.8)% |

* Percentage not meaningful

(1) For the year ended December 31, 2008, percentages from certain line items do not sum to the total of those line items due to rounding.

Cost of peptide sales increased by approximately $45,900, or 38.9%, to $164,034 in 2008 from $118,096 in 2007 and decreased by approximately $44,900 in 2007, or 27.5%, from $162,991 in 2006. Cost of peptide sales as a percentage of related revenue for the years ended December 31, 2008, 2007 and 2006 was 86.6%, 43.6% and 509.3%, respectively. In 2006, the high cost of peptide sales as a percentage of related revenue was principally due to the write down of $151,400 of inventory to its net realizable value during that period. During 2007, a portion of this written down peptide inventory was sold to third parties and a related party, resulting in a higher gross margin for the year ended December 31, 2007. The higher cost of peptide sales in absolute dollars and as a percentage of related revenue in 2008 compared to 2007 was primarily due to the aforementioned timing of inventory write down and subsequent sales.

Cost of administrative services revenue for the year ended December 31, 2008 consisted primarily of marketing service expenses. Cost of administrative services revenue in 2007 was not material. We did not incur any cost of administrative services revenue in 2006.

Other cost of revenue increased by approximately $28,800, or 141.4%, to $49,237 in 2008 from $20,396 in 2007. The increase in 2008 included approximately $9,700 of costs related to product manufacturing and distribution and $19,100 of professional fees incurred in connection with a joint development agreement. The increase in 2007 compared to 2006 primarily consisted of materials used in development activities. Other cost of revenue in 2006 was not material.

The higher gross margin in 2007 compared to 2008 and 2006 primarily resulted from the 2007 sales of peptides whose values had been previously written down as discussed above.

***Research and Development Expenses***

Research and development (R&D) expenses consist primarily of compensation and benefit expenses, stock-based compensation expense, cost of external studies and trials, and contract and other outside service fees related to our R&D efforts. R&D expenses for the years ended December 31, 2008, 2007 and 2006 are summarized in the table below.

| | Year Ended December 31, 2008 | % Change 2008 to 2007 | Year Ended December 31, 2007 | % Change 2007 to 2006 | Year Ended December 31, 2006 |
|---|---|---|---|---|---|
| Research and development expenses ..... | $827,361 | 5.8% | $782,075 | (20.9)% | $988,451 |
| Percentage of total revenue ..... | 147.0% | | 168.6% | | 1393.4% |

R&D expenses increased by approximately $45,300, or 5.8%, to $827,361 in 2008 from $782,075 in 2007 and decreased by approximately $206,400 in 2007, or 20.9%, from $988,451 in 2006. The increase in R&D expenses in 2008 compared to 2007 was primarily due to increases in employee compensation and benefit expenses and stock-based compensation, partially offset by lower spending in lab consumables, external studies and travel expenses. The decrease in R&D expenses in 2007 compared to 2006 was principally due to decreases in lab consumables, external studies, employee benefit expenses and stock-based compensation, partially offset by an increase in consulting fees. As a percentage of our total revenue, R&D expenses decreased to 147.0% in 2008 from 168.6% in 2007 and 1393.4% in 2006. These percentage decreases are attributable principally to the increase in our total revenue, which grew at a higher rate than our R&D expenses.

Compensation and benefit expenses related to R&D employees for the year ended December 31, 2008 included approximately $35,900 of employee benefits that were allocated to R&D expenses starting in 2008, whereas in previous years they were recorded in general and administrative expenses. We anticipate R&D expenses to increase in absolute dollars for the foreseeable future as we expect to incur expenses on external testing and studies related to the development of our new consumer products as well as our pharmaceutical programs.

*Marketing and Business Development Expenses*

Marketing and business development (M&BD) expenses consist primarily of compensation and benefit expenses, stock-based compensation expense, consulting fees and various marketing costs. M&BD expenses for the years ended December 31, 2008, 2007 and 2006 are summarized in the table below.

| | Year Ended December 31, 2008 | % Change 2008 to 2007 | Year Ended December 31, 2007 | % Change 2007 to 2006 | Year Ended December 31, 2006 |
|---|---|---|---|---|---|
| Marketing and business development expenses | $401,019 | (9.6)% | $443,732 | (9.6)% | $490,706 |
| Percentage of total revenue | 71.2% | | 95.6% | | 691.7% |

M&BD expenses decreased by approximately $42,700, or 9.6%, to $401,019 in 2008 from $443,732 in 2007 and by approximately $47,000 in 2007, or 9.6%, from $490,706 in 2006. The decrease in M&BD expenses in 2008 compared to 2007 was primarily due to decreases in consulting fees and stock-based compensation expense, partially offset by an increase in marketing expenses related to the launching of our new proprietary-branded products in 2008. The decrease in M&BD expenses in 2007 compared to 2006 was primarily due to a net decrease in compensation and benefit expenses attributable to severance payments to our former Vice President of Business Development in October 2006 and a decrease in stock-based compensation expense, partially offset by an increase in consulting fees. As a percentage of our total revenue, M&BD expenses decreased to 71.2% in 2008 from 95.6% in 2007 and 691.7% in 2006. These percentage decreases are attributable both to the increase in our total revenue and to the decrease in M&BD expenses in absolute dollars.

Compensation and benefit expenses related to M&BD for the year ended December 31, 2008 included approximately $9,400 of employee benefits that were allocated to M&BD expenses starting in 2008, whereas in previous years they were recorded in general and administrative expenses. We anticipate M&BD expenses to increase in absolute dollars for the foreseeable future as we expect to incur expenses on market testing and promotions related to the introduction of our new consumer products.

*General and Administrative Expenses*

General and administrative (G&A) expenses consist primarily of salaries and benefit expenses, stock-based compensation expense, consulting fees and general corporate expenditures. G&A expenses for the years ended December 31, 2008, 2007 and 2006 are summarized in the table below.

| | Year Ended December 31, 2008 | % Change 2008 to 2007 | Year Ended December 31, 2007 | % Change 2007 to 2006 | Year Ended December 31, 2006 |
|---|---|---|---|---|---|
| General and administrative expenses | $1,918,826 | 0.6% | $1,906,820 | 4.0% | $1,832,858 |
| Percentage of total revenue | 340.9% | | 411.0% | | 2583.7% |

G&A expenses increased by approximately $12,000, or 0.6%, to $1,918,826 in 2008 from $1,906,820 in 2007 and by approximately $74,000 in 2007, or 4.0%, from $1,832,858 in 2006. The increase in G&A expenses in 2008 compared to 2007 was primarily due to increases in stock-based compensation and consulting fees, partially offset by compensation and benefit expenses, travel expenses, administrative costs for our patents, compliance costs associated with the Sarbanes-Oxley Act of 2002 and other G&A expenses. The increase in G&A expenses in 2007 compared to 2006 was due primarily to increases in compensation and benefit expenses, facility costs attributable to the expansion of leased space beginning in December 2006, administrative costs for our patents, compliance costs associated with the Sarbanes-Oxley Act of 2002 and other G&A expenses, partially offset by a decrease in stock-based compensation. The decrease in stock-based compensation in 2007 was principally due to certain options becoming fully vested in 2006.

As a percentage of our total revenue, G&A expenses decreased to 340.9% in 2008 from 411.0% in 2007 and 2583.7% in 2006. These percentage decreases are attributable principally to the increase in our total revenue, which grew at a higher rate than our G&A expenses. We anticipate G&A expenses for the foreseeable future to be consistent with the level experienced in 2008.

*Accounting, Legal and Professional Fees Expenses*

Accounting, legal and professional fees expenses for the years ended December 31, 2008, 2007 and 2006 are summarized in the table below.

| | Year Ended December 31, 2008 | % Change 2008 to 2007 | Year Ended December 31, 2007 | % Change 2007 to 2006 | Year Ended December 31, 2006 |
|---|---|---|---|---|---|
| Accounting, legal and professional fees expenses | $570,719 | 6.2% | $537,176 | 68.9% | $318,113 |
| Percentage of total revenue | 101.4% | | 115.8% | | 448.4% |

Accounting, legal and professional fees expenses increased by approximately $33,500, or 6.2%, to $570,719 in 2008 from $537,176 in 2007 and by approximately $219,100 in 2007, or 68.9%, from $318,113 in 2006. The increase in accounting, legal and professional fees expenses in 2008 compared to 2007 was primarily due to an increase in accounting fees related to audit and tax services, partially offset by a decrease in legal expenses related to licensing activities. The increase in accounting, legal and professional fees expenses in 2007 compared to 2006 was primarily attributable to higher audit fees and higher legal expenses associated with increased activities in the out-licensing of our technology. As a percentage of our total revenue, accounting, legal and professional fees expenses decreased to 101.4% in 2008 from 115.8% in 2007 and 448.4% in 2006. These percentage decreases are attributable principally to the increase in our total revenue, which grew at a higher rate than our accounting, legal and professional fees expenses. We expect accounting, legal and professional fees expenses for the foreseeable future to be consistent with the level experienced in 2008.

*Depreciation and Amortization Expenses*

Depreciation and amortization expenses for the years ended December 31, 2008, 2007 and 2006 are summarized in the table below.

| | Year Ended December 31, 2008 | % Change 2008 to 2007 | Year Ended December 31, 2007 | % Change 2007 to 2006 | Year Ended December 31, 2006 |
|---|---|---|---|---|---|
| Depreciation and amortization expenses | $133,754 | (23.2)% | $174,225 | (3.6)% | $180,755 |
| Percentage of total revenue | 23.8% | | 37.6% | | 254.8% |

Depreciation and amortization expenses decreased by approximately $40,500, or 23.2%, to $133,754 in 2008 from $174,225 in 2007 and by approximately $6,500 in 2007, or 3.6%, from $180,755 in 2006. The decrease in depreciation and amortization expenses in 2008 and 2007 compared to the respective prior year was primarily due to incremental depreciation expenses from assets purchased in 2008 and 2007 being offset by reduced depreciation from other assets becoming fully depreciated. As a percentage of our total revenue, depreciation and amortization expenses decreased to 23.8% in 2008 from 37.6% in 2007 and 254.8% in 2006. These percentage decreases are attributable both to the increase in our total revenue and the decrease in depreciation and amortization expenses in absolute dollars. We do not currently anticipate investing significantly in capital assets for the foreseeable future and therefore expect our depreciation and amortization expenses to decrease slightly year over year.

***Other Income (Expense), Net***

Other income (expense), net consists of interest income, interest expense related to the convertible note payable issued in February 2008 and amended in June 2008, accretion of discount on the convertible note payable, and change in valuation of derivative instruments and unrealized loss related to our auction rate securities (ARS) deemed to be other than temporary. Other income (expense), net for the years ended December 31, 2008, 2007 and 2006 is summarized in the table below.

| | Year Ended December 31, 2008 | % Change 2008 to 2007 | Year Ended December 31, 2007 | % Change 2007 to 2006 | Year Ended December 31, 2006 |
|---|---|---|---|---|---|
| Interest income | $ 60,836 | (28.1)% | $84,575 | 13.4% | $74,608 |
| Interest expense | (212,547) | * | — | — | — |
| Accretion of discount on convertible note payable, related party | (831,426) | * | — | — | — |
| Change in value of derivative instruments, including related party | 11,803 | * | — | — | — |
| Unrealized loss on marketable securities | (30,000) | * | — | — | — |
| Realized gain on redemption of marketable securities | 30,000 | * | — | — | — |
| Other income (expense), net | $(971,334) | (1248.5)% | $84,575 | 13.4% | $74,608 |

*Interest Income.* Interest income decreased by approximately $23,700, or 28.1%, to $60,836 in 2008 from $84,575 in 2007 and increased by approximately $10,000 in 2007, or 13.4%, from $74,608 in 2006. The decrease in interest income in 2008 compared to 2007 was principally due to lower average cash balances and lower interest rates available for our cash and investments. The increase in interest income in 2007 compared to 2006 was primarily due to a higher average interest rate in 2007. In light of the current turmoil in the financial markets, we kept all of our cash assets in cash and cash equivalents as of December 31, 2008 and expect to do so for the foreseeable future. As a result, we expect that the yield on our cash balances will decrease in the near term.

*Interest Expense.* For the year ended December 31, 2008, interest expense incurred was due primarily to the convertible note payable issued in February 2008 and amended in June 2008 to a related party. We did not have any debt outstanding in 2007 or 2006 and therefore did not incur any interest expense during those periods. We anticipate interest expense to increase significantly in connection with our recent convertible note and warrant offering until those notes are repaid or converted into equity. (See Note 17 of our Notes to Financial Statements.)

*Accretion of Discount on Convertible Note Payable, Related Party.* For the year ended December 31, 2008, accretion of discount on the convertible note payable issued in February 2008 and amended in June 2008 to a related party was approximately $831,400, which represented the increase in carrying value of the convertible note from the issuance date through June 27, 2008. At June 27, 2008, this convertible note payable was effectively extinguished and replaced by an amended note payable (see Note 2 of our Notes to Financial Statements). As a result, we expect no further accretion of discount on this convertible note payable. As we did not have such debt outstanding in 2007 and 2006, we did not incur expenses related to accretion of discount on debt for those periods.

*Change in Value of Derivative Instruments.* For the year ended December 31, 2008, the change in fair value of the derivative instruments related to the convertible note payable to a related party resulted in a net gain of approximately $11,800, comprised of a decrease of approximately $473,700 in the fair value of outstanding warrants and non-employee stock options (liability), partially offset by a decrease of $186,500 in the fair value of the put option (asset) and an increase of approximately $275,400 in the fair value of the warrant related to the original convertible note payable (liability). At the amendment of the convertible note payable on June 27, 2008, in accordance with EITF 96-19, we recorded an extinguishment of the original convertible note payable and reclassified the fair value of the then outstanding derivative instruments to equity. Since then, there has been no change in fair value of the derivative instruments related to the outstanding convertible note payable at each of the reporting dates.

*Unrealized Loss and Realized Gain on Marketable Securities.* During the first quarter of 2008, we recognized an unrealized loss of $30,000 on our investment in ARS due to the lack of liquidity associated with these investments at that time. During the third and fourth quarters of 2008, we were able to sell or redeem all of our ARS at par and therefore, recorded a realized gain on investments of $30,000. We did not experience any unrealized or realized gain or loss on marketable securities in 2007 and 2006.

**Liquidity and Capital Resources**

Since inception, we have financed our operations primarily through the private sale of debt and equity securities. Our current principal sources of liquidity are cash and cash equivalents. As of December 31, 2008, our cash and cash equivalents totaled approximately $985,000, a decrease of approximately $176,400 from the balances of cash, cash equivalents and marketable securities at December 31, 2007. This decrease was primarily attributable to the cash used in operations during 2008 of approximately $3.1 million, and purchases of capital assets and investment in website development of approximately $29,500, partially offset by the net proceeds from a private debt financing of approximately $3.0 million in February 2008.

The following table summarizes our cash, cash equivalents and available-for-sale marketable securities for the periods presented:

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2008 | 2007 | Increase/ (Decrease) |
| Cash and cash equivalents | $984,844 | $ 461,290 | $ 523,554 |
| Marketable securities | — | 700,000 | (700,000) |
| Total cash, cash equivalents and marketable securities | $984,844 | $1,161,290 | $(176,446) |

We use a professional investment management firm to manage a portion of our invested cash. At December 31, 2007, our holdings of available-for-sale marketable securities of $700,000 were comprised of ARS. While these ARS have contractual maturities that can be well in excess of ten years, they are structured to allow for short-term interest rate resets which occur at intervals of 28 days, at which time we could auction to sell or continue to hold these securities at par. During the first two months of 2008, we liquidated $500,000 of our investment in ARS at par. In February 2008, ARS increasingly failed at auction due to sell orders exceeding buy orders. Consequently, at the end of the first quarter of 2008, we recognized an unrealized loss of $30,000 on our investment in ARS due to the lack of liquidity associated with these investments at that time. During the third and fourth quarters of 2008, we were able to sell or redeem the remaining $200,000 of our ARS at par and therefore recorded a total realized gain on investments of $30,000. We moved all proceeds from sales and redemption of ARS into cash or cash equivalents.

The following table summarizes our cash flows from operating, investing and financing activities for 2008, 2007 and 2006:

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2008 | 2007 | 2006 |
| Net cash used in operating activities | $(3,141,666) | $(3,211,842) | $(3,025,361) |
| Net cash provided by (used in) investing activities | (299,520) | 252,873 | (1,109,718) |
| Net cash provided by financing activities | 3,964,740 | 2,143,358 | 2,584,021 |

***Cash Flows from Operating Activities***

Net cash used in operating activities for the years ended December 31, 2008, 2007 and 2006 was approximately $3.1 million, $3.2 million and $3.0 million, respectively, derived primarily from the net loss for the periods plus the effect of non-cash expenses. We continue to experience negative cash flows from operating activities due to the cash requirements to support our current level of operations while expanding our revenue base. The primary working capital uses of cash for 2008 were an increase in inventory as well as decreases in deferred revenue and trade payables, partially offset by a decrease in prepaid assets and an increase in accrued

compensation and benefits. Working capital uses of cash for 2007 primarily resulted from increases in receivables, inventory and prepaid assets and a decrease in accrued compensation and benefits, partially offset by increases in trade payables, accrued expenses and deferred revenue.

Accounts receivable decreased by approximately $33,400 in 2008 and increased by approximately $83,900 in 2007. These changes were primarily attributable to the timing of product shipments, royalty reports received from our licensees and the achievement of certain milestones under applicable license and development agreements. Inventory increased by approximately $46,100 in 2008 compared to an increase of approximately $65,300 in 2007, primarily due to a broader product offering and our need to maintain inventory at certain levels to meet customer required lead times. Deferred revenue decreased by $130,000 in 2008 and increased by $69,000 in 2007, due primarily in each case to the timing of the achievement of certain milestones under applicable license and development agreements.

***Cash Flows from Investing Activities***

Net cash used in investing activities for the year ended December 31, 2008 was approximately $299,500 compared to net cash provided of approximately $252,900 for the year ended December 31, 2007 and net cash used of approximately $1.1 million for the year ended December 31, 2006. Cash flows from investing activities primarily relate to purchases, sales and maturities of available-for-sale marketable securities and acquisition of capital equipment. Net cash used in 2008 was primarily attributable to the subscription deposits of $970,000 related to our recent convertible note and warrant offering held as restricted cash, payments for website development costs of $17,000 and purchases of capital assets of approximately $12,500, partially offset by proceeds from sales and redemption of ARS of $700,000. Net cash provided by investing activities in 2007 was attributable to net proceeds from sales and redemption of available-for-sale investments of $280,000, partially offset by purchases of capital assets of approximately $27,100. For 2009, we do not expect the level of capital expenditures to be significant.

***Cash Flows from Financing Activities***

We have financed our operations primarily with proceeds from private sale of debt and equity securities. Cash provided by financing activities for the years ended December 31, 2008, 2007 and 2006 was approximately $4.0 million, $2.1 million and $2.6 million, respectively.

In 2008, cash provided by financing activities was approximately $4.0 million, consisting of net proceeds from a convertible promissory note of approximately $3.0 million issued to a related party in February 2008 and amended in June 2008 (2008 Note) and subscription deposits of $970,000 for our recent offering of unsecured convertible notes payable and warrants (2009 Note and Warrant Offering) (see Note 2 of our Notes to Financial Statements). The 2008 Note and related accrued interest are due and payable on July 1, 2011, or upon an event of default under the note, including in the event we file for bankruptcy, unless converted pursuant to the terms of the note. Deposits for the 2009 Note and Warrant Offering were held as restricted cash until achievement of the minimum aggregate subscription level of $1.5 million in February 2009, at which time we issued convertible promissory notes and warrants to the subscribing investors and the restrictions on use of the funds were released.

In 2007, cash provided by financing activities of approximately $2.1 million consisted of net proceeds from the issuance of an aggregate of 2,864,998 shares of our common stock.

In 2006, cash provided by financing activities of approximately $2.6 million consisted of net proceeds from the issuance of an aggregate of 2,598,000 shares of our common stock and warrants to purchase up to 259,800 shares of our common stock. The warrants have a 5-year term and a per share purchase price of $1.00.

During the first quarter of 2009, we completed the 2009 Note and Warrant Offering and issued convertible promissory notes in the aggregate principal amount of approximately $3.47 million with an interest rate of 8% per annum (2009 Notes) together with warrants to purchase an aggregate of 868,500 shares of our common stock at an exercise price of $1.00 per share (see Note 17 of our Notes to Financial Statements). Based on the current status of our operating and product commercialization development plans, we estimate that our existing

cash and cash equivalents, including cash raised through issuance of the 2009 Notes, will be sufficient to fund our operations, begin initial work towards pharmaceutical product development and support the continued expansion of our consumer program through the next twelve months. We will need substantial additional capital in order to maintain the current level of operations beyond the next twelve months, continue commercialization of our technology and advance our pharmaceutical programs. Accordingly, we will need to raise additional funding, which may include debt and/or equity financing. However, there is no assurance that additional funding will be available on favorable terms, if at all. If we are unable to obtain the necessary additional funding, we would be required to severely reduce the scope of our operations, which would significantly impede our ability to proceed with current operational plans and could lead to the discontinuation of our business.

The amount of capital we will need in the future will depend on many factors, including capital expenditures and hiring plans to accommodate future growth, research and development plans, future demand for our products and technology, and general economic conditions.

### Contractual Obligations and Commercial Commitments

We lease office and laboratory space under an operating lease expiring in November 2009 which includes an option to extend the lease for three years. Rental expense including operating costs for the years ended December 31, 2008, 2007 and 2006 was $106,892, $108,521 and $67,475, respectively. Our lease agreement provides for scheduled rent increases over the lease term. Minimum rental expenses are recognized on a straight-line basis over the term of the lease. The following table summarizes our lease obligations and estimated commercial commitments as of December 31, 2008 and the effect such obligations are expected to have on liquidity in future periods:

| | Payments Due by Period | | |
|---|---|---|---|
| **Contractual Obligations** | **2009** | **> 2 Years** | **Total** |
| Operating lease | $ 70,763 | $ — | $ 70,763 |
| Purchase obligations(1) | 102,804 | — | 102,804 |
| Convertible note payable, related party and related accrued interest(2) | — | 3,211,069 | 3,211,069 |
| | $173,567 | $3,211,069 | $3,384,636 |

(1) On August 2, 2007, we entered into an agreement with Peptisyntha, Inc. for the purchase of a certain peptide over a period of eighteen months from the agreement date. The aggregate purchase requirement under this agreement over the eighteen-month period is $234,000. As of December 31, 2008, we had placed orders totaling $131,200 under this agreement. We fulfilled our obligation to purchase the remaining peptide requirement of approximately $102,800 in January 2009.

(2) Interest on the 2008 Note is accrued at the rate of 8% per annum and is due and payable on the earlier of July 1, 2011 or when called by the note holder upon an event of default, including in the event we file for bankruptcy. Assuming no principal prepayments on the 2008 Note and no conversion into equity before July 1, 2011, we would incur approximately $811,000 of total interest thereon.

### Recent Accounting Pronouncements

In December 2007, the Financial Accounting Standards Board (FASB) issued SFAS No. 141(R), *Business Combinations*, which replaces SFAS No. 141, *Business Combinations*. This standard requires all business combinations to be accounted for under the acquisition method (previously referred to as the purchase method.) Under the acquisition method, the acquirer recognizes the assets acquired, the liabilities assumed, contractual contingencies, as well as any non-controlling interests in the acquiree at their fair value at the acquisition date. Non-contractual contingencies are recognized at the acquisition date at their fair value only if it is more likely than not that they meet the definition of an asset or a liability in FASB Concepts Statement No. 6, *Elements of Financial Statements*. Transaction costs are excluded from the acquisition accounting and will be expensed as

incurred. Any contingent consideration included by the acquirer as part of the purchase price must also be measured at fair value at the acquisition date and will be classified as either equity or a liability. This standard also requires a company that obtains control but acquires less than 100% of an acquiree to record 100% of the fair value of the acquiree's assets, liabilities, and non-controlling interests at the acquisition date. This standard is effective for periods beginning on or after December 15, 2008. The impact, if any, of adopting SFAS 141R will depend on the nature and terms of future acquisitions.

In December 2007, the FASB issued SFAS No. 160, *Non-Controlling Interests in Consolidated Financial Statements*, which amends Accounting Research Bulletin No. 51, *Consolidated Financial Statements*. This standard requires non-controlling interests to be treated as a separate component of equity, but apart from the parent's equity and not as a liability or an item outside of equity. This will eliminate diversity that currently exists in accounting for transactions between an entity and its non-controlling interest. This standard also specifies that consolidated net income attributable to the parent and to the non-controlling interest be clearly identified and presented on the face of the consolidated statement of income, and that changes in the parent's ownership of interest while it retains a controlling financial interest should be accounted for as equity transactions. This standard also expands disclosure in the financial statements to include a reconciliation of the beginning and ending balances of the equity attributable to the parent and the non-controlling owners and a schedule showing the effect of changes in a parent's ownership interest in a subsidiary on the equity attributable to the parent. This standard is effective for periods beginning on or after December 15, 2008. We do not expect the adoption of SFAS 160 to have an impact on our financial position and results of operations.

In March 2008, the FASB issued SFAS No. 161, *Disclosures about Derivative Instruments and Hedging Activities*. The new standard is intended to improve financial reporting about derivative instruments and hedging activities by requiring enhanced disclosures to enable investors to better understand their effects on an entity's financial position, financial performance, and cash flows. Entities are required to provide enhanced disclosures about: (a) how and why an entity uses derivative instruments; (b) how derivative instruments and related hedged items are accounted for under SFAS No. 133 and its related interpretations; and (c) how derivative instruments and related hedged items affect an entity's financial position, financial performance, and cash flows. This standard is effective for financial statements issued for fiscal years and interim periods beginning after November 15, 2008, with early application encouraged. Since SFAS No. 161 requires only additional disclosures concerning derivatives and hedging activities, we do not expect the adoption of SFAS No. 161 to have an impact on our financial condition and results of operations.

In April 2008, the FASB issued FASB Staff Position (FSP) No. 142-3 (FSP 142-3), *Determination of the Useful Life of Intangible Assets,* which amends the factors that should be considered in developing renewal or extension assumptions used to determine the useful life of a recognized intangible asset under SFAS No. 142, *Goodwill and Other Intangible Assets*. FSP 142-3 must be applied prospectively to intangible assets acquired in fiscal years and interim periods beginning after December 15, 2008. Early adoption is prohibited. The impact, if any, of adopting FSP 142-3 will depend on the nature and terms of future acquisitions of intangible assets, if any.

In May 2008, the FASB issued SFAS No. 162, *The Hierarchy of Generally Accepted Accounting Principles* (SFAS 162), which identifies the sources of accounting principles and the framework for selecting the principles used in the preparation of financial statements of nongovernmental entities that are presented in conformity with generally accepted accounting principles. SFAS 162 will become effective 60 days following approval by the SEC of the Public Company Accounting Oversight Board amendments to AU Section 411, *The Meaning of Present Fairly in Conformity With Generally Accepted Accounting Principles*. We do not expect the adoption of SFAS 162 to have a material effect on our financial position and results of operations.

In May 2008, the FASB issued FSP No. APB 14-1, *Accounting for Convertible Debt Instruments That May Be Settled in Cash upon Conversion (Including Partial Cash Settlement)* (APB 14-1). APB 14-1 specifies that issuers of such instruments should separately account for the liability and equity components in a manner that will reflect the entity's nonconvertible debt borrowing rate when interest cost is recognized in subsequent periods. This FSP is effective for financial statements issued for fiscal years beginning after December 15, 2008 and interim periods within those fiscal years and is applied retrospectively to all periods presented. We are currently evaluating the impact, if any, that APB 14-1 may have on our financial position and results of operations.

In June 2008, the FASB ratified EITF Issue No. 07-5, *Determining Whether an Instrument (or an Embedded Feature) is Indexed to an Entity's Own Stock* (EITF 07-5), which provides that an entity should use a two-step approach to evaluate whether an equity-linked financial instrument (or embedded feature) is indexed to its own stock, including evaluating the instrument's contingent exercise and settlement provisions. EITF 07-5 is effective for fiscal years beginning after December 15, 2008. We are currently evaluating the impact, if any, that this standard may have on our financial position and results of operations.

In June 2008, the FASB issued EITF Issue No. 08-4, *Transition Guidance for Conforming Changes to Issue No. 98-5* (EITF 08-4). The objective of EITF 08-4 is to provide transition guidance for conforming changes made to EITF Issue No. 98-5, *Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustable Conversion Ratios* that result from EITF Issue No. 00-27, *Application of Issue No. 98-5 to Certain Convertible Instruments*, and SFAS Issue No. 150, *Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity*. EITF 08-4 is effective for financial statements issued for fiscal years ending after December 15, 2008 and early application is permitted. We are currently evaluating the impact, if any, that EITF 08-4 may have on our financial position and results of operations.

**Subsequent Events**

In the first quarter of 2009, we completed the 2009 Note and Warrant Offering and issued the 2009 Notes in an aggregate principal amount of approximately $3.47 million and warrants to purchase an aggregate of 868,500 shares of our common stock at an exercise price of $1.00 per share. The 2009 Notes bear interest at the rate of 8% per annum and are due and payable on July 1, 2011 unless:

(i) converted automatically

(a) upon the consummation of an equity financing with proceeds to us of at least $7.5 million (Equity Financing) whereupon the 2009 Notes shall be converted automatically into shares of our capital stock issued in the Equity Financing at a price equal to the lesser of the per share price of the securities issued and sold in the Equity Financing and $1.00, or

(b) upon the consummation of a sale of substantially all of our assets or a merger or consolidation in which our stockholders will hold, in the aggregate, less than 50% of the voting power of the combined entity whereupon the 2009 Notes shall be converted automatically into shares of our common stock at a price equal to the lesser of the per share price attributed to our common stock in connection with such transaction and $1.00; or

(c) upon the consummation of the sale and issuance of 2009 Notes in an aggregate principal amount of $7.5 million on terms and conditions mutually agreed upon by us and the holder(s) of a majority-in-interest of then-outstanding 2009 Notes;

(ii) converted voluntarily at and as of the maturity date into shares of our common stock at a price equal to $1.00;

(iii) we default under the 2009 Notes, in which event the 2009 Notes shall become immediately due and payable.

The Vice President and Treasurer of Cardinal Court LLC, which purchased a convertible note in the principal amount of $2.0 million and received a warrant to purchase up to 500,000 shares of our common stock in the 2009 Note and Warrant Offering, is Frank T. Nickell, who beneficially owned approximately 29.5% of our outstanding common stock as of March 19, 2009.

## ITEM 8. *FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA*

**Index to Financial Statements** **Page**

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors
Helix BioMedix, Inc.

We have audited the accompanying balance sheets of Helix BioMedix, Inc. as of December 31, 2008 and 2007, and the related statements of operations, stockholders' equity (deficit), and cash flows for each of the years in the three-year period ended December 31, 2008. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the auditing standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Helix BioMedix, Inc. as of December 31, 2008 and 2007, and the results of its operations and its cash flows for each of the years for the three-year period ended December 31, 2008, in conformity with U.S. generally accepted accounting principles.

As discussed in Note 1 to the financial statements, Helix BioMedix, Inc. adopted Financial Accounting Standards Board Interpretation No. 48, Accounting for Income Tax Uncertainties, effective January 1, 2007.

/s/ KPMG LLP

Seattle, Washington
March 26, 2009

## HELIX BIOMEDIX, INC.

## BALANCE SHEETS

| | December 31, 2008 | December 31, 2007 |
|---|---|---|
| **ASSETS** | | |
| Current assets: | | |
| Cash and cash equivalents | $ 984,844 | $ 461,290 |
| Restricted cash — subscription deposits for the 2009 Note and Warrant Offering (Note 2) | 970,000 | — |
| Marketable securities, current | — | 700,000 |
| Accounts receivable, net | 50,467 | 83,915 |
| Inventory | 111,411 | 65,279 |
| Prepaid expenses and other current assets | 104,706 | 144,074 |
| Total current assets | 2,221,428 | 1,454,558 |
| Deposits | 8,522 | 8,522 |
| Property and equipment, net | 120,154 | 126,509 |
| Intangible assets, net | 353,603 | 432,482 |
| Total assets | $ 2,703,707 | $ 2,022,071 |
| **LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)** | | |
| Current liabilities: | | |
| Accounts payable | $ 71,824 | $ 95,071 |
| Accrued compensation and benefits | 101,734 | 63,813 |
| Accrued expenses | 61,563 | 60,269 |
| Deferred revenue | — | 130,000 |
| Deferred rent, current | 2,039 | — |
| Other current liabilities — subscription deposits for the 2009 Note and Warrant Offering (Note 2) | 970,000 | — |
| Total current liabilities | 1,207,160 | 349,153 |
| Deferred rent, non-current | — | 2,205 |
| Convertible note payable, related party | 3,000,000 | — |
| Accrued interest on convertible note payable, related party | 211,069 | — |
| Total liabilities | 4,418,229 | 351,358 |
| Commitments and contingencies | | |
| Stockholders' equity (deficit): | | |
| Preferred stock, $0.001 par value, 25,000,000 shares authorized; no shares issued or outstanding | — | — |
| Common stock, $0.001 par value, 100,000,000 shares authorized; 25,653,512 shares issued and outstanding at December 31, 2008 and 2007 | 25,654 | 25,654 |
| Additional paid-in capital | 30,342,249 | 29,211,972 |
| Accumulated deficit | (32,082,425) | (27,566,913) |
| Total stockholders' equity (deficit) | (1,714,522) | 1,670,713 |
| Total liabilities and stockholders' equity (deficit) | $ 2,703,707 | $ 2,022,071 |

See accompanying notes to financial statements.

## HELIX BIOMEDIX, INC.

## STATEMENTS OF OPERATIONS

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2008 | 2007 | 2006 |
| Revenue: | | | |
| Licensing and development fees | $ 319,152 | $ 193,381 | $ 38,940 |
| Peptide sales | 189,450 | 206,160 | 32,000 |
| Peptide sales, related party | — | 64,400 | — |
| Consumer product sales | 12,000 | — | — |
| Administrative services revenue, related party | 42,275 | — | — |
| Total revenue | 562,877 | 463,941 | 70,940 |
| Cost of revenue: | | | |
| Cost of peptide sales | 164,034 | 118,096 | 162,991 |
| Cost of administrative services revenue, related party | 42,105 | — | — |
| Other cost of revenue | 49,237 | 20,396 | — |
| Total cost of revenue | 255,376 | 138,492 | 162,991 |
| Gross profit (loss) | 307,501 | 325,449 | (92,051) |
| Operating expenses: | | | |
| Research and development | 827,361 | 782,075 | 988,451 |
| Marketing and business development | 401,019 | 443,732 | 490,706 |
| General and administrative | 1,918,826 | 1,906,820 | 1,832,858 |
| Accounting, legal and professional fees | 570,719 | 537,176 | 318,113 |
| Depreciation and amortization | 133,754 | 174,225 | 180,755 |
| Total operating expenses | 3,851,679 | 3,844,028 | 3,810,883 |
| Loss from operations | (3,544,178) | (3,518,579) | (3,902,934) |
| Other income (expense): | | | |
| Interest income | 60,836 | 84,575 | 74,608 |
| Interest expense on convertible note payable, related party | (212,547) | — | — |
| Accretion of discount on convertible note payable, related party | (831,426) | — | — |
| Change in value of derivative instruments, including related party | 11,803 | — | — |
| Unrealized loss on marketable securities | (30,000) | — | — |
| Realized gain on sales and redemptions of marketable securities | 30,000 | — | — |
| Other income (expense), net | (971,334) | 84,575 | 74,608 |
| Net loss | $ (4,515,512) | $ (3,434,004) | $ (3,828,326) |
| Basic and diluted net loss per share | $ (0.18) | $ (0.14) | $ (0.17) |
| Weighted average shares outstanding | 25,653,512 | 25,139,745 | 22,343,087 |

See accompanying notes to financial statements.

## HELIX BIOMEDIX, INC.

## STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)

| | Common Stock | | Additional Paid-in Capital | Deferred Stock Compensation | Accumulated Deficit | Accumulated Other Comprehensive Income | Stockholders' Equity (Deficit) | Total Comprehensive Income (Loss) |
|---|---|---|---|---|---|---|---|---|
| | Number of Shares | Amount | | | | | | |
| Balance at December 31, 2005 | 20,190,514 | $20,190 | $23,906,974 | $(105,000) | $(20,304,583) | $ — | $ 3,517,581 | $ — |
| Adjustment to reclassify deferred compensation to additional paid-in capital upon adoption of FAS 123R | — | — | (105,000) | 105,000 | — | — | — | — |
| Proceeds from 2006 Private Placement, net | 2,598,000 | 2,598 | 2,581,423 | — | — | — | 2,584,021 | — |
| Stock-based compensation | — | — | 524,801 | — | — | — | 524,801 | — |
| Net loss for the year | — | — | — | — | (3,828,326) | — | (3,828,326) | (3,828,326) |
| Balance at December 31, 2006 | 22,788,514 | 22,788 | 26,908,198 | — | (24,132,909) | — | 2,798,077 | (3,828,326) |
| Proceeds from 2007 Private Placement, net | 2,864,998 | 2,866 | 2,140,492 | — | — | — | 2,143,358 | — |
| Stock-based compensation | — | — | 163,282 | — | — | — | 163,282 | — |
| Net loss for the year | — | — | — | — | (3,434,004) | — | (3,434,004) | (3,434,004) |
| Balance at December 31, 2007 | 25,653,512 | 25,654 | 29,211,972 | — | (27,566,913) | — | 1,670,713 | (3,434,004) |
| Stock-based compensation | — | — | 314,928 | — | — | — | 3[illegible],928 | — |
| Reclassification of warrants and options from equity to derivative liabilities | — | — | (1,255,317) | — | — | — | (1,255,317) | — |
| Extinguishment of convertible note payable, related party | — | — | 733,317 | — | — | — | 733,317 | — |
| Reclassification of warrants and options from derivative liabilities to equity | — | — | 1,337,349 | — | — | — | 1,337,349 | — |
| Unrealized gain on marketable securities | — | — | — | — | — | 30,000 | 30,000 | 30,000 |
| Reclassification of realized gain to income due to redemption of marketable securities | — | — | — | — | — | (30,000) | (30,000) | (30,000) |
| Net loss for the year | — | — | — | — | (4,515,512) | — | (4,515,512) | (4,515,512) |
| Balance at December 31, 2008 | 25,653,512 | $25,654 | $30,342,249 | $ — | $(32,082,425) | $ — | $(1,714,522) | $(4,515,512) |

See accompanying notes to financial statements.

## HELIX BIOMEDIX, INC.

## STATEMENTS OF CASH FLOWS

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2008 | 2007 | 2006 |
| **Cash Flows from Operating Activities** | | | |
| Net loss | $(4,515,512) | $(3,434,004) | $(3,828,326) |
| Adjustments to reconcile net loss to net cash used in operating activities: | | | |
| Depreciation | 54,875 | 95,346 | 101,876 |
| Amortization | 78,879 | 78,880 | 78,879 |
| Stock-based compensation expense | 314,928 | 163,282 | 524,801 |
| Interest expense on convertible note payable, related party | 212,547 | — | — |
| Accretion of discount on convertible note payable, related party | 831,426 | — | — |
| Change in valuation of derivative instruments, including related party | (11,803) | — | — |
| Unrealized loss on marketable securities | 30,000 | — | — |
| Realized gain on sales and redemption of marketable securities | (30,000) | — | — |
| Loss on sale of assets | — | — | 1,177 |
| Changes in operating assets and liabilities: | | | |
| Accounts receivable, net | 33,448 | (83,915) | 18,988 |
| Inventory | (46,132) | (65,279) | 35,316 |
| Prepaid expenses and other current assets | 38,876 | (50,732) | 8,021 |
| Deposits | — | (4,311) | (4,201) |
| Accounts payable | (23,247) | 29,522 | 7,556 |
| Accrued compensation and benefits | 37,921 | (44,790) | 108,603 |
| Other accrued liabilities | (17,872) | 35,159 | (139,051) |
| Deferred revenue | (130,000) | 69,000 | 61,000 |
| Net cash used in operating activities | (3,141,666) | (3,211,842) | (3,025,361) |
| **Cash Flows from Investing Activities** | | | |
| Purchases of marketable securities | — | (1,300,000) | (980,000) |
| Proceeds from sales and redemptions of marketable securities | 700,000 | 1,580,000 | — |
| Proceeds from sale of assets | — | — | 535 |
| Restricted cash from convertible debt subscriptions | (970,000) | — | — |
| Purchase of property and equipment | (12,520) | (27,127) | (130,253) |
| Website development | (17,000) | — | — |
| Net cash provided by (used in) investing activities | (299,520) | 252,873 | (1,109,718) |
| **Cash Flows from Financing Activities** | | | |
| Cash deposits for convertible debt subscription | 970,000 | — | — |
| Proceeds from issuance of convertible note payable, related party | 3,000,000 | — | — |
| Financing costs related to convertible note payable, related party | (5,260) | — | — |
| Proceeds from issuance of common stock and warrants, net | — | 2,143,358 | 2,584,021 |
| Net cash provided by financing activities | 3,964,740 | 2,143,358 | 2,584,021 |
| **Net increase(decrease) in cash and cash equivalents** | 523,554 | (815,611) | (1,551,058) |
| **Cash and cash equivalents at beginning of period** | 461,290 | 1,276,901 | 2,827,959 |
| **Cash and cash equivalents at end of period** | $ 984,844 | $ 461,290 | $ 1,276,901 |
| Supplemental cash flow information: | | | |
| Cash paid for income taxes | $ — | $ — | $ — |
| Cash paid for interest | $ — | $ — | $ — |
| Non-cash investing and financing activities | | | |
| Reclassification of warrants and options from equity to derivative liabilities | $ 1,255,317 | $ — | $ — |
| Extinguishment of convertible note payable, related party | $ 733,317 | $ — | $ — |
| Reclassification of warrants and options from derivative liabilities to equity | $ 1,337,349 | $ — | $ — |
| Website development costs recorded in accrued expenses | $ 19,000 | $ — | $ — |

See accompanying notes to financial statements.

## HELIX BIOMEDIX, INC.

## NOTES TO FINANCIAL STATEMENTS

### Note 1. Description of the Business and Summary of Significant Accounting Policies

#### The Business

Helix BioMedix, Inc. (the Company), a Delaware corporation, is a biopharmaceutical company with an extensive library of structurally diverse bioactive peptides and patents covering hundreds of thousands of peptide sequences. The Company has developed short, small-chain peptides with anti-infective and anti-inflammatory properties such as the stimulation of cell proliferation and migration. These peptides are targeted for use as ingredients in cosmeceutical products and as new topical therapeutics. Possible applications include anti-aging skin care, acne treatment, wound healing, and the treatment of fungal dermatoses.

From 1988 until early 2007, the Company operated primarily as a technology development company, generating a portfolio of intellectual property focused on identifying and developing synthetic bioactive peptides and, to a lesser extent, commercializing the extensive library of patented bioactive peptides the Company had developed. During 2007, the Company began generating consistent revenue through license agreements with skin care manufacturers and through collaborative development agreements. In the third quarter of 2007, the Company moved from the development stage to the commercialization stage. In addition, in the fourth quarter of 2008, the Company launched its first proprietary branded skin care product line and began selling through distribution channels in the United States.

Although the Company has made progress with respect to the licensing of its peptide technology and business development efforts, the Company's cost to license its peptide technology, conduct its business development efforts and other operating activities has exceeded its revenues each year since inception. Additionally, the Company's net cash used in operations has exceeded its cash generated from operations for each year since its inception.

During the first quarter of 2009, the Company completed a note and warrant offering and issued convertible promissory notes in an aggregate principal amount of $3,474,000 (2009 Notes) and warrants to purchase an aggregate of 868,500 shares of the Company's common stock at an exercise price of $1.00 per share. The 2009 Notes bear interest at the rate of 8% per annum. All unpaid principal balance and accrued interest are due on the earlier of July 1, 2011, or upon an event of default under the 2009 Notes, including in the event that the Company files for bankruptcy. (See Note 17 for a detailed discussion of the 2009 Notes.)

Based on the current status of the Company's operating plans and product commercialization development, the Company estimates that its existing cash and cash equivalents, including cash raised through the issuance of the 2009 Notes, will be sufficient to fund its operations, begin initial work towards pharmaceutical product development and support the continued expansion of its consumer program through the next twelve months. The Company will need substantial additional capital in order to maintain the current level of operations beyond the next twelve months, continue commercialization of its technology and advance its pharmaceutical programs. Accordingly, the Company will need to raise additional funding through available means, which may include debt and/or equity financing. However, there is no assurance that additional funding will be available on favorable terms, if at all. If the Company is unable to obtain the necessary additional funding, the Company would be required to severely reduce the scope of its operations, which would significantly impede its ability to proceed with current operational plans and could lead to the discontinuation of its business.

#### Use of Estimates

The preparation of the Company's financial statements in conformity with U.S. Generally Accepted Accounting Principles requires the Company's management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the dates of the balance sheets and the reported amounts of revenue and expenses during the reporting periods. Significant items subject to such estimates and assumptions include, but are not limited to, the carrying amount of investments,

property, plant and equipment, intangibles; valuation allowances for receivables, inventories, deferred income tax assets; and valuation of share-based compensation, notes payable and obligations related to derivative instruments. Actual results could differ from those estimates.

**Cash and Cash Equivalents**

The Company considers all highly liquid debt instruments with an original maturity of 90 days or less at the time of purchase to be cash equivalents. Cash and cash equivalents are comprised of demand deposits and money market funds and are stated at cost, which approximates fair value. The Company deposits its cash and cash equivalents with high credit quality financial institutions. The Company regularly maintains cash balances in excess of federally insured limits. To date, the Company has not experienced any losses on its cash and cash equivalents.

**Restricted Cash**

At December 31, 2008, the Company had a restricted cash balance of $970,000 which represented the aggregate subscription deposits toward the Company's note and warrant offering. These deposits were held by the Company as restricted cash until achievement of the minimum aggregate subscription level of $1,500,000 in February 2009, at which time the Company issued convertible promissory notes to the subscribing investors and the restrictions on use of the funds were released (see Notes 2 and 17).

**Marketable Securities**

The Company classifies its marketable securities as available-for-sale. Marketable securities are reported at estimated fair value with the related unrealized gains and losses included as a component of accumulated other comprehensive income (loss) in stockholders' equity. Realized gains, losses, and declines in value of securities judged to be other than temporary are included in other non-operating income (expense). The cost of investments for purposes of computing realized and unrealized gains and losses is based on the specific identification method. The Company's management estimates fair value based on valuation techniques defined by Statement of Financial Accounting Standards (SFAS) No. 157, *Fair Value Measurements* (SFAS 157), including using observable inputs such as quoted prices in active market for identical or similar investments. When observable inputs are not sufficiently available, the Company's management estimates fair value by incorporating assumptions that market participants would use in their estimates of fair value, which may include credit quality, estimates on the probability of the securities being called prior to final maturity and the liquidity of the securities. As of December 31, 2008, the Company held no marketable securities.

**Accounts Receivable and Allowance for Doubtful Accounts**

Accounts receivable are shown at their net realizable value which approximates their fair value. The Company does not currently maintain an allowance for doubtful accounts based on the Company's management's consideration of historical collection experience and the characteristics of existing accounts. The Company has not had any accounts receivable allowances or write-offs for any period presented.

**Inventory**

Inventory is stated at the lower of cost or market (as determined by the first-in, first-out method). Inventory consists of peptides purchased for resale and various products of the Company's new skin care product line. Inventory write-downs, if any, are recorded for potentially excess inventory based on forecasted demand, economic trends and technological obsolescence of the Company's products.

**Property and Equipment**

Property and equipment, which includes laboratory equipment, furniture and leasehold improvements, are stated at cost. Depreciation of equipment is provided using the straight-line basis over three to five years. Leasehold improvements are amortized over the lesser of the economic useful lives of the improvements or the term of the related lease. Repair and maintenance costs are expensed as incurred.

**Website Development**

During 2008, the Company began the development of a new website that reflects the Company's expanded vision and branding. As of December 31, 2008, the Company had capitalized $36,000 of costs associated with the Company's website. The website was launched in January 2009 and all capitalized website development costs will be amortized over the website's estimated useful life of three years on a straight line basis starting in February 2009. The Company accounts for these costs in accordance with EITF 00-2, *Accounting for Website Development Costs,* which specifies the appropriate accounting for costs incurred in connection with the development and maintenance of websites.

**Intangible Assets**

Acquired patents and costs for issued patents, consisting primarily of legal fees, are capitalized. Patents are amortized on the straight line basis over the useful life of the patents, generally thirteen years.

Licensing agreements and antimicrobial technology, which was purchased in conjunction with certain patents, has been capitalized at the basis of the debt issued for it. Licensing agreements and antimicrobial technology are amortized ratably over seventeen years.

**Impairment of Long-Lived Assets**

Long-lived assets including property and equipment are reviewed for possible impairment whenever significant events or changes in circumstances, including changes in the Company's business strategy and plans, indicate that an impairment may have occurred. An impairment is indicated when the sum of the expected future undiscounted net cash flows identifiable to that asset or asset group is less than its carrying value. Impairment losses are determined from actual or estimated fair values, which are based on market values, net realizable values or projections of discounted net cash flows, as appropriate. No impairment of long-lived assets has been recognized in the accompanying financial statements.

**Revenue Recognition**

The Company derives its revenue from technology licenses, joint development agreements, sales of consumer products and peptides, and administrative services provided to a related party. Revenue under technology licenses may include up-front payments and royalties from third-party product manufacturing and sales. Revenue associated with joint development agreements primarily consists of payments for completion of development milestones. For agreements with multiple elements, the Company follows Emerging Issues Task Force (EITF) Issue No. 00-21, *Revenue Arrangements with Multiple Deliverables*, to determine whether each element can be separated into a unit of accounting based on the following criteria: (1) the delivered items have value to the customer on a stand-alone basis; (2) any undelivered items have objective and reliable evidence of fair value; and, (3) delivery or performance of the undelivered items that have a right of return is probable and within our control. If there is objective and reliable evidence of fair value for all units of accounting in an arrangement, the Company allocates revenue among the separate units of accounting based on their estimated fair values. If the criteria are not met, elements included in an arrangement are accounted for as a single unit of accounting and revenue is deferred until the period in which the final deliverable is provided. When the period of

deferral cannot be specifically identified from the agreement, the Company estimates the period based upon other factors contained within the agreement. The Company's management continually reviews these estimates, which could result in a change in the deferral period and the timing and the amount of revenue recognized.

- ***Licensing Fees.*** The Company recognizes up-front payments when persuasive evidence of an agreement exists, delivery has occurred or services have been performed, the price is fixed and determinable and collection is reasonably assured. The Company recognizes royalty revenue in the period the royalty is earned based on reports received from licensees or other information available through the date of issuance of the financial statements. The Company's management must occasionally make estimates on certain royalty revenue amounts due to the timing of securing information from our customers. While the Company's management believes it can make reliable estimates for certain royalty revenue, these estimates are inherently subjective. Accordingly, the Company's estimates of royalty revenue could differ from actual events, thus impacting the Company's financial position and results of operations.
- ***Development Fees.*** The Company records revenue associated with performance milestones as earned when it has completed the specific milestones as defined in the joint development agreements and there are no uncertainties or contingencies regarding collection of the related payment. Payments received for which the earnings process is not complete are recorded as deferred revenue.
- ***Consumer Product Sales and Peptide Sales.*** The Company recognizes revenue from sales of its skin care products and peptides when persuasive evidence of an arrangement exists, delivery has occurred, the price is fixed or determinable and collection is reasonably assured. In the future, peptide sales may be transacted directly between the licensees and a third-party manufacturer, which could have an adverse effect on the Company's revenue.
- ***Administrative Services Revenue, Related Party.*** The Company's administrative services revenue consists of fees received from DermaVentures, LLC (DermaVentures), a related party, for marketing campaign costs associated with DermaVentures' product line and other out-of-pocket expenses the Company incurs on DermaVentures' behalf. Administrative services revenue is invoiced to DermaVentures at or near cost and is recorded as earned when services have been rendered, no obligations remain outstanding and collection is reasonably assured. In accordance with EITF Issue No. 99-19, *Reporting Revenue Gross as a Principal versus Net as an Agent,* and EITF Issue No. 01-14, *Income Statement Characterization of Reimbursements Received for 'Out-of-Pocket' Expenses Incurred,* fees received from DermaVentures are reported as administrative services revenue, while related costs are included in cost of revenue in the statements of operations.

**Research and Development**

Research and development costs are expensed as incurred. Research and development expenses include, but are not limited to, payroll and personnel expenses, lab supplies and expenses, and external trials and studies. In instances where the Company enters into agreements with third parties for research and development activities, which may include personnel costs, supplies and other costs associated with such collaborative agreements, the Company expenses these items as incurred.

**Income Taxes**

The Company accounts for income taxes under the provisions of Statement of Financial Accounting Standards (SFAS) No 109, *Accounting for Income Taxes,* (SFAS 109) which requires recognition of deferred tax assets and liabilities for the expected future income tax consequences of transactions that have been included in the financial statements or tax returns. Under this method, deferred tax assets and liabilities are measured based on the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in

effect in the years in which those carryforwards and temporary differences are expected to be recovered or settled. Gross deferred tax assets then may be reduced by a valuation allowance for amounts that do not satisfy the realization criteria of SFAS 109.

Effective January 1, 2007, the Company adopted Financial Accounting Standards Board (FASB) Interpretation No. 48, *Accounting for Income Tax Uncertainties* (FIN 48). FIN 48 addresses the accounting of uncertainty in income taxes recognized in the financial statements and prescribes a recognition threshold of more-likely-than-not for recognition and derecognition of tax positions taken or expected to be taken in a tax return. FIN 48 requires that companies recognize in the financial statements the impact of a tax position if that position is more likely than not of being sustained on audit, based on the technical merits of the position. FIN 48 also provides guidance on derecognition of a previously recognized tax position, classification, interest and penalties, accounting in interim periods and disclosures.

The Company currently has a full valuation allowance against its net deferred tax assets and has not recognized any benefits from tax positions in earnings. Accordingly, the adoption of the provisions of FIN 48 had no impact on the Company's financial statements.

**Loss per Share**

Loss per share has been computed using the weighted average number of shares outstanding during the period. Diluted per share amounts reflect potential dilution from the exercise or conversion of securities into common stock or from other contracts to issue common stock. The Company's capital structure includes common stock options and common stock warrants, all of which have been excluded from net loss per share calculations as they are antidilutive, as follows:

| | Year Ended December 31, | |
|---|---|---|
| | 2008 | 2007 |
| Weighted average outstanding options | 3,069,484 | 2,879,530 |
| Weighted average outstanding warrants | 3,083,741 | 2,700,544 |

**Fair Value of Financial Instruments**

The reported amounts of the Company's financial instruments, including cash and cash equivalents, accounts receivable, accounts payable and other current liabilities, approximate fair values due to the short-term nature of these instruments. Estimated fair values of marketable securities, which are separately disclosed elsewhere, are based on quoted market prices for the same or similar instruments. Estimated fair value of the outstanding $3.0 million convertible note payable of $3.2 million at December 31, 2008 is based on many judgments, including but not limited to term of maturity, interest rate, the Company's financial condition and credit risk, and prevailing market economic conditions for similar debt instruments.

**Derivative Instruments**

The Company accounts for its derivative instruments in accordance with the provisions of SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities* (SFAS 133), and EITF Issue No. 00-19, *Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock* (EITF 00-19), which require derivative instruments to be classified as permanent equity, temporary equity or as assets or liabilities. In general, the Company's derivative instruments that either require net-cash settlement or are presumed to require net-cash settlement are recorded as assets and liabilities at fair value and the Company's derivative instruments that require settlement in shares are recorded as equity instruments.

***Valuation of Warrants and Stock Options Unrelated to the Issuance of Convertible Note Payable***

In connection with the issuance of the convertible note payable on February 14, 2008 to a related party and the potential contractual obligation to grant the associated warrant, the Company classified the fair value of warrants and non-employee stock options (Other Warrant Liabilities) as derivative liabilities as there was a potential that the Company would not have a sufficient number of authorized common shares available to settle these instruments (see Note 2). The Company valued these warrants and options using a Black-Scholes model and used estimates for an expected dividend yield, a risk-free interest rate, and expected volatility (see Note 7). At each reporting period, as long as the warrants and non-employee stock options were outstanding and there was the potential for an insufficient number of authorized shares available to settle these instruments, the warrants and options were revalued and any difference from the previous valuation date was recognized as a change in fair value in the Company's statement of operations.

On June 27, 2008, the Company entered into an amendment to the convertible note payable (see Note 2) which effectively extinguished the original note payable and related derivative instruments, including the potential contractual obligation to grant the associated warrant. In accordance with the guidance of EITF Issue No. 96-19, *Debtor's Accounting for a Modification or Exchange of Debt Instruments*, the Company accounted for this modification as an extinguishment of the original note payable and recorded the amended note payable as new debt. Among other changes, the amended note limits the number of shares issuable under it and therefore eliminates the net-cash settlement requirement for Other Warrant Liabilities. As a result, the Company is no longer required to account for Other Warrant Liabilities as derivative liabilities. The June 27, 2008 fair value of the Other Warrant Liabilities was therefore reclassified to additional paid-in capital.

***Valuation of Warrant Related to Convertible Note Payable, Related Party***

In accordance with SFAS 133 and EITF 00-19, the Company classified the fair value of the warrant that may have been granted in connection with the convertible note payable issued on February 14, 2008 (see Note 2) as a derivative liability as there was a potential that the Company would not have a sufficient number of authorized common shares available to settle this instrument. The Company valued this warrant using a Black-Scholes model and used estimates for an expected dividend yield, a risk-free interest rate, and expected volatility together with management's estimate of the probability of issuance of the warrant. At each reporting period, as long as the warrant was potentially issuable and there was a potential for an insufficient number of authorized shares available to settle the warrant, the warrant was revalued and any difference from the previous valuation date was recognized as a change in fair value in the Company's statement of operations.

On June 27, 2008, the Company entered into an amendment to the convertible note payable (see Note 2) which effectively extinguished the original note payable and related derivative instruments, including the potential contractual obligation to grant the associated warrant. The June 27, 2008 fair value of the warrant was reclassified to additional paid-in capital.

In connection with the issuance of the amended note payable, the Company issued to the related party a warrant to purchase up to 750,000 shares of the Company's common stock at an exercise price of $1.00 per share. Pursuant to the guidance in EITF 00-19, this warrant is accounted for as an equity instrument.

***Valuation of Conversion Rights Related to Convertible Note Payable, Related Party***

In connection with the issuance of the convertible note payable on February 14, 2008 and under the guidance of SFAS 133, the Company was required to separately account for the fair value of the Company's right to automatically convert the note payable to equity at the price of equity securities issued in the sale of shares of its equity securities that raises an aggregate amount of at least $5,000,000 on or before June 29, 2008 (see Note 2).

On June 27, 2008, the Company entered into an amendment to the convertible note payable (see Note 2) which effectively extinguished the original note payable, including its embedded derivative instruments. The June 27, 2008 fair value of the separately-accounted-for embedded derivative instruments was credited to additional paid-in capital as part of recording the capital transaction resulting from the extinguishment of the original note payable.

Pursuant to the guidance in SFAS 133, EITF 00-19 and other relevant literature, the conversion rights of the amended convertible note payable are not required to be accounted for separately.

***Valuation of Call Option Related to Convertible Note Payable, Related Party***

The convertible note payable issued on February 14, 2008 and subsequently amended on June 27, 2008 includes a call option which gives the holder the right to demand repayment in the case of default. Under the guidance of SFAS 133, the Company is required to separately account for the fair value of the call option. The Company determined that the call option had no value at February 14, 2008 or at each of the reporting dates since then based on an analysis of the rights this feature contained and the likelihood of its exercise.

***Valuation of Prepayment Right Related to Convertible Note Payable, Related Party***

The convertible note payable issued on February 14, 2008 and subsequently amended on June 27, 2008 allows the Company to prepay the unpaid balance of the convertible note and accrued interest at any time and without penalty. Under the guidance of SFAS 133, the Company is required to separately account for the fair value of the prepayment right. The Company determined that this right had no value at February 14, 2008 or at each of the reporting dates since then based on an analysis of the right and the likelihood of its exercise.

**Stock-Based Compensation**

Effective January 1, 2006, the Company adopted the fair value recognition provisions of SFAS No. 123(R), *Share-Based Payment* (SFAS 123R), using the modified-prospective-transition method. Under this method, stock-based compensation expense is measured at the grant date based on the fair value of the award and is recognized as expense on a straight-line basis over the requisite service period, which is generally the vesting period. Compensation expense is recognized only for those options expected to vest.

The Company uses the Black-Scholes option pricing model to determine the fair value of stock options. The determination of the fair value of stock-based awards on the date of grant using an option pricing model is affected by the Company's stock price as well as assumptions regarding a number of complex and subjective variables. These variables include management's estimated stock price volatility over the expected term of the awards, estimated employee stock option exercise behaviors, the risk-free interest rate, estimated forfeitures and expected dividends.

Stock options and warrants issued to non-employees are accounted for using the fair value method prescribed by EITF Issue No. 96-18, *Accounting for Equity Instruments that are Issued to Other than Employees for Acquiring, or in Conjunction with Selling, Goods or Services*, and EITF Issue No. 00-18, *Accounting for Certain Transactions Involving Equity Instruments Granted to Other Than Employees.*

**Comprehensive Income (Loss)**

The provisions of SFAS No. 130, *Reporting Comprehensive Income*, require companies to present comprehensive income (consisting primarily of net income items plus other equity changes and credits) and its components as part of the basic financial statements. Comprehensive income (loss) for 2008, 2007 and 2006 is set forth in the Statements of Stockholders' Equity (Deficit).

**Reclassifications**

Reclassifications of prior years' balances have been made to conform to the current format. Specifically, in the Statements of Operations, costs of revenue have been moved from operating expenses and presented separately in the Cost of Revenue section. This reclassification had no impact on the financial results in the periods presented.

**Recently Issued Accounting Pronouncements**

In December 2007, the Financial Accounting Standards Board (FASB) issued SFAS No. 141(R), *Business Combinations*, which replaces SFAS No. 141, *Business Combinations*. This standard requires all business combinations to be accounted for under the acquisition method (previously referred to as the purchase method.) Under the acquisition method, the acquirer recognizes the assets acquired, the liabilities assumed, contractual contingencies, as well as any non-controlling interests in the acquiree at their fair value at the acquisition date. Non-contractual contingencies are recognized at the acquisition date at their fair value only if it is more likely than not that they meet the definition of an asset or a liability in FASB Concepts Statement No. 6, *Elements of Financial Statements*. Transaction costs are excluded from the acquisition accounting and will be expensed as incurred. Any contingent consideration included by the acquirer as part of the purchase price must also be measured at fair value at the acquisition date and will be classified as either equity or a liability. This standard also requires a company that obtains control but acquires less than 100% of an acquiree to record 100% of the fair value of the acquiree's assets, liabilities, and non-controlling interests at the acquisition date. This standard is effective for periods beginning on or after December 15, 2008. The impact, if any, of adopting SFAS 141R will depend on the nature and terms of future acquisitions.

In December 2007, the FASB issued SFAS No. 160, *Non-Controlling Interests in Consolidated Financial Statements*, which amends Accounting Research Bulletin No. 51, *Consolidated Financial Statements*. This standard requires non-controlling interests to be treated as a separate component of equity, but apart from the parent's equity and not as a liability or an item outside of equity. This will eliminate diversity that currently exists in accounting for transactions between an entity and its non-controlling interest. This standard also specifies that consolidated net income attributable to the parent and to the non-controlling interest be clearly identified and presented on the face of the consolidated statement of income, and that changes in the parent's ownership of interest while it retains a controlling financial interest should be accounted for as equity transactions. This standard also expands disclosure in the financial statements to include a reconciliation of the beginning and ending balances of the equity attributable to the parent and the non-controlling owners and a schedule showing the effect of changes in a parent's ownership interest in a subsidiary on the equity attributable to the parent. This standard is effective for periods beginning on or after December 15, 2008. The Company does not expect the adoption of SFAS 160 to have an impact on its financial position and results of operations.

In March 2008, the FASB issued SFAS No. 161, *Disclosures about Derivative Instruments and Hedging Activities*. The new standard is intended to improve financial reporting about derivative instruments and hedging activities by requiring enhanced disclosures to enable investors to better understand their effects on an entity's financial position, financial performance, and cash flows. Entities are required to provide enhanced disclosures about: (a) how and why an entity uses derivative instruments; (b) how derivative instruments and related hedged items are accounted for under SFAS No. 133 and its related interpretations; and (c) how derivative instruments and related hedged items affect an entity's financial position, financial performance, and cash flows. This standard is effective for financial statements issued for fiscal years and interim periods beginning after November 15, 2008, with early application encouraged. Since SFAS No. 161 requires only additional disclosures concerning derivatives and hedging activities, the Company does not expect the adoption of SFAS No. 161 to have an impact on its financial condition and results of operations.

In April 2008, the FASB issued FASB Staff Position (FSP) No. 142-3 (FSP 142-3), *Determination of the Useful Life of Intangible Assets*, which amends the factors that should be considered in developing renewal or

extension assumptions used to determine the useful life of a recognized intangible asset under SFAS No. 142, *Goodwill and Other Intangible Assets*. FSP 142-3 must be applied prospectively to intangible assets acquired in fiscal years and interim periods beginning after December 15, 2008. Early adoption is prohibited. The impact, if any, of adopting FSP 142-3 will depend on the nature and terms of future acquisitions of intangible assets, if any.

In May 2008, the FASB issued SFAS No. 162, *The Hierarchy of Generally Accepted Accounting Principles* (SFAS 162), which identifies the sources of accounting principles and the framework for selecting the principles used in the preparation of financial statements of nongovernmental entities that are presented in conformity with generally accepted accounting principles. SFAS 162 will become effective 60 days following approval by the SEC of the Public Company Accounting Oversight Board amendments to AU Section 411, *The Meaning of Present Fairly in Conformity With Generally Accepted Accounting Principles*. The Company does not expect the adoption of SFAS 162 to have a material effect on its financial position and results of operations.

In May 2008, the FASB issued FSP No. APB 14-1, *Accounting for Convertible Debt Instruments That May Be Settled in Cash upon Conversion (Including Partial Cash Settlement)* (APB 14-1). APB 14-1 specifies that issuers of such instruments should separately account for the liability and equity components in a manner that will reflect the entity's nonconvertible debt borrowing rate when interest cost is recognized in subsequent periods. This FSP is effective for financial statements issued for fiscal years beginning after December 15, 2008, interim periods within those fiscal years, and is applied retrospectively to all periods presented. The Company is currently evaluating the impact, if any, that APB 14-1 may have on its financial position and results of operations.

In June 2008, the FASB ratified EITF Issue No. 07-5, *Determining Whether an Instrument (or an Embedded Feature) is Indexed to an Entity's Own Stock* (EITF 07-5), which provides that an entity should use a two-step approach to evaluate whether an equity-linked financial instrument (or embedded feature) is indexed to its own stock, including evaluating the instrument's contingent exercise and settlement provisions. EITF 07-5 is effective for fiscal years beginning after December 15, 2008. The Company is currently evaluating the impact, if any, that this standard may have on its financial position and results of operations.

In June 2008, the FASB issued EITF Issue No. 08-4, *Transition Guidance for Conforming Changes to Issue No. 98-5* (EITF 08-4). The objective of EITF 08-4 is to provide transition guidance for conforming changes made to EITF Issue No. 98-5, *Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustable Conversion Ratios* that result from EITF Issue No. 00-27, *Application of Issue No. 98-5 to Certain Convertible Instruments*, and SFAS Issue No. 150, *Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity*. EITF 08-4 is effective for financial statements issued for fiscal years ending after December 15, 2008 and early application is permitted. The Company is currently evaluating the impact, if any, that EITF 08-4 may have on its financial position and results of operations.

## Note 2. Financing Events

### Debt Financing With Related Party

#### *Convertible Note Payable Issued on February 14, 2008*

On February 14, 2008, the Company issued to RBFSC, Inc. (RBFSC), a related party, a convertible promissory note (2008 Note) in the principal amount of $3,000,000 with an interest rate of 8% per annum, which was subsequently amended on June 27, 2008 (see below). Prior to such amendment, the principal balance and accrued interest of the 2008 Note were due on the earlier of February 14, 2010, or upon an event of default under the 2008 Note, including in the event that the Company files for bankruptcy. In the event that the Company closed an equity financing on or before June 29, 2008, in which the Company sold shares of its equity securities for an aggregate amount of at least $5,000,000, the unpaid balance of the 2008 Note and related accrued interest would have automatically converted into the equity securities issued in the equity financing, at the price of such equity securities issued in the equity financing. In the event the Company did not consummate an equity

financing on or before June 29, 2008, the unpaid balance of the 2008 Note and related accrued interest could be converted, at the option of the holder, into common shares at a price equal to 80% of the average per share closing price of the Company's common stock during the preceding 90-day period, and the Company would have been obligated to issue to RBFSC a warrant (2008 Warrant) to purchase that number of shares of its common stock equal to $750,000 divided by the per share closing sale price of the Company's common stock on the date of issuance. The president and director of RBFSC is Frank T. Nickell, who beneficially owned approximately 29.5% and 26.1% of the Company's outstanding common stock as of March 19, 2009 and March 19, 2008, respectively.

Due to the indeterminate number of common shares which might have been issued under the embedded conversion feature and the 2008 Warrant, the Company recorded the value of the 2008 Warrant as a derivative liability at its fair value in accordance with SFAS 133 and EITF 00-19, as there was a potential that the Company would not have a sufficient number of authorized shares to settle these obligations. In addition, the Company re-measured the fair value of this derivative liability at the end of each reporting period. The Company estimated the fair value of the 2008 Warrant to be $280,347 at February 14, 2008. At March 31, 2008, the Company estimated the fair value of this derivative liability had increased to $503,122 and, as a result, recognized the change in value of $222,775 in its statement of operations. At June 27, 2008, the Company estimated the fair value of this derivative liability to be $555,674 and, as a result, recognized the change in value of $52,552 in its statement of operations. The fair value of the 2008 Warrant was determined by applying management's estimate of the probability of issuance of the 2008 Warrant together with the Black-Scholes option pricing model with the following key assumptions:

| | February 14, 2008 | March 31, 2008 | June 27, 2008 |
|---|---|---|---|
| Risk-free interest rate | 2.81% | 2.46% | 3.36% |
| Expected dividend yield | 0 | 0 | 0 |
| Expected term in years | 5.00 | 5.00 | 4.75 |
| Expected volatility | 98% | 98% | 99% |

The 2008 Note also included embedded features in the form of a call option and put option that were required to be separately accounted for at fair value on the balance sheet with changes in value recognized in the statement of operations under SFAS 133 as the features were not clearly and closely related to the convertible note debt instrument. The embedded call option, which gave the holder the right to demand repayment in the case of default, was determined by management to have no value at February 14, 2008 or March 31, 2008, based on an analysis of the rights this feature contains and the likelihood of its exercise. The embedded put option gave the Company the right to automatically convert the 2008 Note into the equity securities issued in the equity financing. The Company estimated the fair value of the put option associated with the 2008 Note to be $186,512 at February 14, 2008. At March 31, 2008, the Company estimated the fair value of this derivative asset had decreased to $24,170 and, as a result, recognized the change in value of $162,342 in its statement of operations. At June 27, 2008, the Company estimated the fair value of this put option to be $0 as the Company was not intending to exercise the option and, as a result, recognized the change in value of $24,170 in its statement of operations. The fair value of this derivative asset was determined by applying management's estimate of the probability of the Company's exercising the put option together with the Black-Scholes option pricing model with the following key assumptions:

| | February 14, 2008 | March 31, 2008 |
|---|---|---|
| Risk-free interest rate | 2.26% | 1.32% |
| Expected dividend yield | 0 | 0 |
| Expected term in years | 0.37 | 0.25 |
| Expected volatility | 79% | 79% |

The Company accounted for the 2008 Note in accordance with SFAS No. 150, *Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity* (SFAS 150), as the conversion feature embedded in the 2008 Note resulted in the holder receiving a fixed monetary value through the receipt of a variable number of the Company's common shares. The Company determined the value of the 2008 Note at February 14, 2008 to be $2,906,165, which represented the gross proceeds from the debt financing less the fair value of the 2008 Warrant, offset by the fair value of the put option held by the Company. The 2008 Note was being accreted from its carrying value of $2,906,165 at February 14, 2008 to its settlement amount of $3,750,000 at June 29, 2008, the first possible settlement date, through the statement of operations using the effective interest method. As of June 27, 2008, an expense of $831,426 has been recorded as accretion of discount on convertible note payable, related party, thereby increasing the carrying value of the 2008 Note to $3,737,591.

***Amended Convertible Note Payable Issued on June 27, 2008***

On June 27, 2008, the Company entered into a First Amendment to Note and Warrant Purchase Agreement and Convertible Promissory Note with RBFSC pursuant to which (1) the 2008 Note was amended (the Amended Note) as follows: (i) the maturity date of the Amended Note is July 1, 2011, and (ii) the Amended Note is convertible (a) upon the consummation by the Company of an equity financing with proceeds to the Company of at least $7,500,000, whereupon the Amended Note shall be converted automatically into shares of the Company's capital stock issued in the equity financing at a price equal to the lesser of the per share price of the securities issued and sold in the equity financing and $1.00, (b) upon the consummation of a sale of substantially all of the Company's assets or a merger or consolidation of the Company in which the Company's stockholders will hold, in the aggregate, less than 50% of the voting power of the combined entity, whereupon the Amended Note shall be converted automatically into shares of the Company's common stock at a price equal to the lesser of the per share price attributed to the Company's common stock in connection with such transaction and $1.00, or (c) voluntarily by RBFSC at and as of the maturity date into shares of the Company's common stock at a price of $1.00; and (2) the 2008 Warrant was amended and restated in its entirety such that RBFSC shall be entitled to purcha[illegible] up to 750,000 shares of the Company's common stock at an exercise price of $1.00 per share (the Restated Warra[illegible], which Restated Warrant was issued by the Company concurrent with the issuance of the Amended Note.

Under the guidance of EITF 96-19, *Debtor's Accounting for a Modification or Exchange of Debt Instruments*, the Company determined that the terms of the Amended Note reflect a substantial modification to the 2008 Note based on an analysis of cash flows for the Amended Note compared to the Note and, as a result, accounted for this modification as an extinguishment of the 2008 Note. As the 2008 Note was a debt to a related party, the Company recorded the debt extinguishment as a capital transaction under Accounting Principles Board (APB) Opinion 26, *Early Extinguishment of Debt.* The Amended Note was accounted for as new debt and was recorded at its $3,000,000 face value because the estimated June 27, 2008 fair value of the Amended Note exceeded its face value.

**Debt Financing — Other**

During the third quarter of 2008, the Company began efforts to obtain additional capital through an offering of unsecured convertible notes payable and warrants (2009 Note and Warrant Offering). As of December 31, 2008, the Company had received an aggregate of $970,000 of subscription deposits toward the 2009 Note and Warrant Offering. The use of these funds was restricted until achievement of the minimum aggregate subscription level of $1,500,000 in February 2009, at which time the Company issued convertible promissory notes and warrants to the subscribing investors and the restrictions on use of the funds were released. At December 31, 2008, deposits received toward the 2009 Note and Warrant Offering were presented as restricted cash and other current liabilities on the Company's balance sheet.

## Note 3. Marketable securities

At December 31, 2007, the Company had $700,000 of investment in auction rate securities (ARS), classified as current available-for-sale marketable securities. These securities are structured to allow for interest rate resets at approximately every 28 days, but with contractual maturities that are well in excess of ten years. Historically, the carrying value of ARS approximated fair value due to the frequent interest rate resets. Until early February 2008, the ARS market was fairly liquid and the Company was able to auction and sell these securities at par at the end of each reset period or continue to hold them. During the first two months of 2008, the Company liquidated $500,000 of its investment in ARS at par and held the proceeds in cash and cash equivalents.

During February 2008, ARS increasingly failed at auction due to sell orders exceeding buy orders. At March 31, 2008, the Company estimated the fair value of its then remaining $200,000 of ARS to be $170,000, a decline of $30,000 from par value due to the illiquidity of the ARS at the time. The Company considered this decline in fair value as other than temporary and, accordingly, recorded an unrealized loss on marketable securities of $30,000 in other non-operating expense in the first quarter of 2008.

During the last half of 2008, all of the Company's remaining ARS were redeemed by the issuers or sold at par, resulting in a realized gain of $30,000. The Company moved the proceeds from these sales and redemption of ARS into cash equivalents. The Company did not have any ARS at December 31, 2008. Marketable securities consisted of the following as of December 31, 2007.

| | Carrying Value | Gross Unrealized Gains | Gross Unrealized Losses | Estimated Fair Value |
|---|---|---|---|---|
| **As of December 31, 2007** | | | | |
| Corporate and municipal auction or floating rate securities with contractual maturities of 9 years to 38 years | $700,000 | — | — | $700,000 |

## Note 4. Fair Value of Financial Instruments

The Company adopted SFAS 157 effective January 1, 2008. In accordance with SFAS 157, the inputs used to measure fair value are summarized in the three broad levels listed below:

- Level 1 — Quoted prices in active markets for identical securities;
- Level 2 — Other significant observable inputs (including quoted prices in active markets for similar securities); and
- Level 3 — Significant unobservable inputs (including the Company's own assumptions in determining fair value of investments).

The inputs or methodology used for valuing securities are not necessarily an indication of the risk associated with investing in those securities. At December 31, 2008, the Company no longer held any marketable securities. The following is a reconciliation of the activities of the ARS during the year ended December 31, 2008:

| Fair value estimates for ARS using significant unobservable inputs (Level 3) | Year Ended December 31, 2008 |
|---|---|
| Beginning balance at January 1, 2008 | $ 700,000 |
| Sales and redemption of ARS at par value | (700,000) |
| Unrealized loss recorded in statements of operations | (30,000) |
| Realized gain recorded in statements of operations | 30,000 |
| Ending balance at December 31, 2008 | $ — |

The Company estimated the fair value of its derivative instruments using the Black-Scholes pricing model with the key assumptions summarized in Notes 2 and 7. The following is a reconciliation of the activities of the derivative liabilities during the year ended December 31, 2008:

| Fair value estimates for derivative liabilities using significant unobservable inputs (Level 3) | Year Ended December 31, 2008 |
|---|---|
| Balance at January 1, 2008 | $ — |
| Reclassification of outstanding warrants and options from equity to derivative liabilities at February 14, 2008 | 1,255,317 |
| Derivative liabilities related to issuance of convertible note payable, related party (Note 2) | 280,347 |
| Change in fair value of derivative warrant liability related to the Note recorded in statements of operations (Note 2) | 275,327 |
| Change in fair value of derivative liability related to non-employee options and other warrants recorded in statements of operations (Note 7) | (473,642) |
| Reclassification of outstanding warrants and options from derivative liabilities to equity due to amendment of convertible note payable on June 27, 2008 | (1,337,349) |
| Ending balance at December 31, 2008 | $ — |

The following is a reconciliation of the activities of the derivative asset during the year ended December 31, 2008:

| Fair value estimates for derivative asset using significant unobservable inputs (Level 3) | Year Ended December 31, 2008 |
|---|---|
| Beginning balance at January 1, 2008 | $ — |
| Derivative asset related to issuance of convertible note payable, related party | 186,512 |
| Change in fair value recorded in statements of operations | (186,512) |
| Ending balance at December 31, 2008 | $ — |

## Note 5. Property and Equipment

Property and equipment consisted of the following:

| | December 31, 2008 | December 31, 2007 |
|---|---|---|
| Machinery and equipment | $ 548,535 | $ 546,496 |
| Website development costs | 36,000 | — |
| Furniture and fixtures | 54,546 | 48,486 |
| Leasehold improvements | 43,993 | 43,993 |
| | 683,074 | 638,975 |
| Less accumulated depreciation | (562,920) | (512,466) |
| Property and equipment, net | $ 120,154 | $ 126,509 |

Aggregate depreciation expense for property and equipment was $54,875, $95,346 and $101,876 for 2008, 2007 and 2006, respectively. Depreciation for website development costs begins in February 2009.

## Note 6. Identifiable Intangible Assets

Identifiable intangible assets, subject to amortization, were as follows:

| | Weighted average amortization period (in years) | December 31, 2008 | | | December 31, 2007 | | |
|---|---|---|---|---|---|---|---|
| | | Gross carrying amount | Accumulated amortization | Intangible assets, net | Gross carrying amount | Accumulated amortization | Intangible assets, net |
| Antimicrobial technology | 17 | $ 222,187 | $(218,193) | $ 3,994 | $ 222,187 | $(207,084) | $ 15,103 |
| Licensing agreements | 17 | 61,391 | (25,165) | 36,226 | 61,391 | (21,570) | 39,821 |
| Patents pending and approved | 13 | 834,301 | (520,918) | 313,383 | 834,301 | (456,743) | 377,558 |
| Total | | $1,117,879 | $(764,276) | $353,603 | $1,117,879 | $(685,397) | $432,482 |

Amortization expense related to identifiable intangible assets was $78,879, $78,880 and $78,879 for 2008, 2007 and 2006, respectively. Scheduled amortization charges from identifiable intangible assets as of December 31, 2008 are as follows:

| Year | Antimicrobial technology | Licensing Agreements | Patents pending and approved | Total |
|---|---|---|---|---|
| 2009 | $3,994 | $ 3,595 | $64,175 | $71,764 |
| 2010 | — | 3,595 | 64,175 | 67,770 |
| 2011 | — | 3,595 | 64,175 | 67,770 |
| 2012 | — | 3,595 | 64,175 | 67,770 |
| 2013 | — | 3,595 | 37,814 | 41,409 |
| Thereafter | $ — | $18,251 | $18,869 | $37,120 |

## Note 7. Stockholders' Equity

### Preferred Stock

The Company's board of directors (the Board) may authorize the issuance of preferred stock from time to time in one or more series and each series shall have such voting, redemption, liquidation and dividend rights as the Board may deem advisable. As of December 31, 2008, no preferred series shares had been designated by the Board.

### Stockholder Rights Agreement

On August 15, 2003, the Board approved the adoption of a Stockholder Rights Agreement pursuant to which all of the Company's stockholders as of September 15, 2003 (the Record Date) received rights to purchase shares of a new series of preferred stock. The rights will be distributed as a non-taxable dividend and will expire ten years from the Record Date. The rights will be exercisable only if a person or group acquires 15 percent or more of the Company's common stock or announces a tender offer for 15 percent or more of the common stock. If a person acquires 15 percent or more of common stock, all rights holders, except the buyer, will be entitled to acquire the Company's common stock at a discount. The effect will be to discourage acquisitions of more than 15 percent of the Company's common stock without negotiations with the Board.

**Common Stock Purchase Warrants**

Information concerning outstanding common stock purchase warrants is set forth below:

| | December 31, | | | | | |
|---|---|---|---|---|---|---|
| | 2008 | | | 2007 | | |
| | Number | Price range | Weighted Average | Number | Price range | Weighted Average |
| Warrants issued to employees and non-employees for services | 1,719,919 | $0.25 – $6.00 | $1.54 | 1,719,919 | $0.25 – $6.00 | $1.54 |
| Remaining warrants issued in connection with 2001 convertible debt financing | 308,000 | $ 1.00 | $1.00 | 308,000 | $ 1.00 | $1.00 |
| Remaining warrants issued in connection with 2002 and 2003 equity financings | 258,600 | $ 1.00 | $1.00 | 258,600 | $ 1.00 | $1.00 |
| Remaining warrants issued in connection with 2004 equity financing | 29,225 | $ 2.00 | $2.00 | 29,225 | $ 2.00 | $2.00 |
| Warrants issued in connection with 2005 equity financing | 125,000 | $ 1.50 | $1.50 | 125,000 | $ 1.50 | $1.50 |
| Warrants issued in connection with 2006 equity financing | 259,800 | $ 1.00 | $1.00 | 259,800 | $ 1.00 | $1.00 |
| Warrants issued in connection with 2008 debt financing | 750,000 | $ 1.00 | $1.00 | — | — | — |
| Total outstanding warrants | 3,450,544 | $0.25 – $6.00 | $1.30 | 2,700,544 | $0.25 – $6.00 | $1.38 |

In 2008, the Company granted to RBFSC, Inc. the Restated Warrant in connection with the issuance of the Amended Note (see Note 2). There were no warrants granted in 2007 or cancelled in either 2008 or 2007.

**Reclassification of Warrants and Non-Employee Stock Options**

The Company's convertible note payable issued on February 14, 2008, as discussed in Note 2, included a conversion feature and issuable warrant which created the potential for the Company to have an insufficient number of authorized common shares available to settle these instruments. As a result, the Company was required to reclassify, at fair value on February 14, 2008, all outstanding warrants and options subject to the provisions of EITF 00-19 from equity to derivative liabilities at fair value. Awards not subject to EITF 00-19 include grants to employees, officers and non-employee directors for board service as long as these grants have not been modified. The Company estimated the fair value of the outstanding warrants and options subject to EITF 00-19 to be $1,255,317, $1,011,103 and $781,677 at February 14, 2008, March 31, 2008 and June 27, 2008, respectively.

In determining the fair value of these warrants and non-employee stock options, the following key assumptions were used in the Black-Scholes option pricing model:

| | February 14, 2008 | March 31, 2008 | June 27, 2008 |
|---|---|---|---|
| **Warrants** | | | |
| Risk-free interest rate | 1.93% – 2.81% | 1.55% – 2.46% | 2.35 – 3.36% |
| Expected dividend yield | 0 | 0 | 0 |
| Expected term in years | 1.14 – 5.29 | 1.02 – 5.25 | 0.77 – 5.00 |
| Expected volatility | 98% – 115% | 98% – 115% | 99% – 107% |
| **Non-Employee Stock Options** | | | |
| Risk-free interest rate | 2.05% – 2.34% | 1.55% – 1.96% | 2.35% – 2.92% |
| Expected dividend yield | 0 | 0 | 0 |
| Expected term in years | 1.50 – 3.63 | 1.37 – 3.50 | 0.70 – 3.25 |
| Expected volatility | 102% – 115% | 103% – 115% | 106% – 107% |

At each reporting period, as long as the warrants and non-employee options were outstanding and there was a potential for an insufficient number of authorized shares available to settle these instruments, the outstanding warrants and non-employee options were revalued and any difference from the previous valuation date was recognized as a change in fair value of derivative liabilities and charged or credited to the statement of operations in accordance with SFAS 133 and EITF 00-19. The fair value of these derivative liabilities decreased by $244,214 from February 14, 2008 to March 31, 2008, and further decreased by $229,428 from March 31, 2008 to June 27, 2008.

On June 27, 2008, the Company entered into an amendment to the convertible note payable (See Note 2) which effectively extinguished the original note payable and related derivative instruments. In accordance to the guidance of EITF No. 96-19, the Company accounted for this modification as an extinguishment of the original note payable. As a result of the modification, outstanding warrants and non-employee options were no longer considered to include a "net cash settlement" provision within the meaning of EITF 00-19, and, therefore, the Company reclassified their fair value from derivative liabilities to equity.

### Stock Offerings

In March 2006, the Company closed a private equity financing, receiving net proceeds of approximately $2,584,000 in exchange for 2,598,000 shares of the Company's common stock and warrants to purchase up to 259,800 shares of the Company's common stock. The warrants have a 5-year term and a per share purchase price of $1.00.

In March 2007, the Company closed a private equity financing, receiving net proceeds of approximately $2,143,400 in exchange for 2,864,998 shares of the Company's common stock.

## Note 8. Stock-Based Compensation

The Helix BioMedix 2000 Stock Option Plan (the 2000 Plan), approved by the Company's stockholders in 2000, is administered by non-employee directors who are authorized to grant stock options to the Company's employees, consultants, and directors. Stock options are granted at exercise prices equal to the market value of the Company's common stock on the date of grant. Stock options granted to employees are typically incentive stock options, as defined and governed by Section 422 of the Internal Revenue Code, and vest at the rate of 1/3 of the total number of shares after one year and monthly thereafter in 24 equal amounts . Options granted to non-employee directors are nonqualified stock options and become exercisable ranging from immediately upon

grant to quarterly over one year. All options granted to employees and non-employee directors expire 10 years from the date of grant.

The Company granted 510,000, 445,000 and 415,000 stock options during the years ended December 31, 2008, 2007 and 2006, respectively. The 2008 option grants included an option to a consultant to purchase up to 100,000 shares of the Company's common stock at an exercise price of $0.57 per share. This option vests over 11 months beginning in October 2008 and has a five-year life. As of December 31, 2008, 55,000 shares related to this option were vested. During 2007, the Company granted to employees and non-employee directors options to purchase 300,000 and 145,000 shares, respectively, of the Company's common stock. Of the employee stock options granted in 2007, the vesting of 100,000 options was subject to the Company's success in achieving certain revenue targets in 2008. The Company did not achieve these revenue targets in 2008 and, as a result, the 100,000 performance options were cancelled at December 31, 2008 and no related stock-based compensation expense was recognized.

The per share weighted-average fair value of stock options granted during 2008, 2007 and 2006 was $0.45, $0.49 and $0.68, respectively, using the Black-Scholes option pricing model with the following assumptions:

| | Year ended December 31, | | |
|---|---|---|---|
| | 2008 | 2007 | 2006 |
| Risk-free interest rate | 1.55 – 2.89% | 3.76 – 4.58% | 4.83% |
| Expected dividend yield | 0 | 0 | 0 |
| Expected term in years | 5.0 – 6.0 | 5.5 – 6.25 | 6.25 |
| Expected volatility | 100 – 102% | 100% | 100% |

The risk free rate is based on the implied yield available on U.S. Treasury zero–coupon issues with an equivalent remaining term. The Company does not anticipate declaring dividends in the foreseeable future. For the years ended December 31, 2008, 2007 and 2006, the Company calculated expected volatility based on the annualized daily historical volatility of the Company's stock price commensurate with the expected term of the option and other factors, including peer company data. The Company estimates the expected term as the average of the vesting period and the contractual term, as prescribed by the simplified method under Staff Accounting Bulletin (SAB) No. 107, *Share-Based Payment*, and amended by SAB No. 110. The Company will continue to use the simplified method until it has sufficient historical data to provide reasonable estimates of expected lives of stock options. The Company's stock price volatility and option term involves management's best estimates at that time, both of which impact the fair value of the option calculated under the Black-Scholes pricing model and, ultimately, the expense that will be recognized over the life of the option. SFAS 123R, *Share-Based Payment*, also requires that the Company recognize compensation expense for only the portion of options that is expected to vest. Therefore, the Company applies an estimated forfeiture rate that is derived from historical employee termination behavior. Forfeiture rates are revised in subsequent periods if actual forfeitures differ from those estimates.

In connection with the departure of the Company's Chief Operating Officer in October 2007, 166,666 unvested stock options were forfeited. The effect of this forfeiture on the stock-based compensation expense for 2007 was not material.

The amount of stock-based compensation expense recognized for the years ended December 31, 2008, 2007 and 2006 related to stock options was approximately $314,900, $163,300 and $524,800, respectively. In June 2008, in connection with the departure of the Company's Vice President and Chief Financial Officer, the Company modified the terms of his options to extend the period during which he may exercise his vested options from 90 days to three years, resulting in a stock-based compensation expense of approximately $60,100 for 2008. Stock-based compensation for 2008 also included approximately $121,800 related to options granted to two officers and $20,800 of expense related to an option grant to a consultant. As of December 31, 2008, the total

unrecognized stock-based compensation related to non-vested stock options was approximately $74,300, which is expected to be recognized over a weighted-average period of approximately 1.4 years.

A summary of the Company's stock compensation expense for 2008, 2007 and 2006 is summarized as follows:

| | 2008 | 2007 | 2006 |
|---|---|---|---|
| Research and development | $ 50,297 | $ 7,442 | $ 87,120 |
| Marketing and business development | 20,352 | 50,190 | 55,138 |
| General and administrative | 244,279 | 105,650 | 382,543 |
| Total stock-based compensation | $314,928 | $163,282 | $524,801 |

A summary of the Company's stock option activity for the years ended December 31, 2008, 2007 and 2006 is presented in the following table:

| | Shares Subject to Options | Weighted Average Exercise Price per Share | Weighted Average Remaining Contractual Life | Aggregate Intrinsic Value |
|---|---|---|---|---|
| Outstanding, December 31, 2005 | 2,592,000 | $1.38 | | |
| Granted | 415,000 | $0.83 | | |
| Exercised | — | — | | |
| Forfeited | (88,056) | $1.80 | | |
| Expired | — | — | | |
| Outstanding, December 31, 2006 | 2,918,944 | $1.29 | | |
| Granted | 445,000 | $0.61 | | |
| Exercised | — | — | | |
| Forfeited | (177,916) | $0.75 | | |
| Expired | (207,500) | $1.21 | | |
| Outstanding, December 31, 2007 | 2,978,528 | $1.22 | | |
| Granted | 510,000 | $0.62 | | |
| Exercised | — | — | | |
| Forfeited | (100,000) | $0.50 | | |
| Expired | (83,334) | $0.75 | | |
| Outstanding, December 31, 2008 | 3,305,194 | $1.17 | 4.68 | $0 |
| Exercisable, December 31, 2008 | 3,096,582 | $1.20 | 4.45 | $0 |

The aggregate intrinsic value in the table above is based on the Company's closing stock price of $0.35 per share on December 31, 2008, which would have been received by the optionees had all of the options with exercise prices less than $0.35 per share been exercised on that date.

As of December 31, 2008, there were 5,355,000 shares of common stock reserved for issuance pursuant to the 2000 Plan, of which 2,049,806 shares remained available for grants. Additional information regarding options outstanding as of December 31, 2008 is as follows:

| | Options Outstanding | | | Options Exercisable | |
|---|---|---|---|---|---|
| Range of Exercise Prices | Shares | Weighted Average Remaining Contractual Life (Years) | Weighted Average Exercise Price | Shares | Weighted Average Exercise Price |
| $0.50 - $0.76 | 860,500 | 7.20 | $0.61 | 681,888 | $0.63 |
| $0.77 - $1.00 | 1,044,000 | 5.09 | $0.96 | 1,014,000 | $0.96 |
| $1.20 - $1.80 | 1,241,250 | 2.71 | $1.63 | 1,241,250 | $1.63 |
| $1.85 - $2.00 | 159,444 | 3.67 | $1.89 | 159,444 | $1.89 |
| $0.50 - $2.00 | 3,305,194 | 4.68 | $1.17 | 3,096,582 | $1.20 |

## Note 9. Employee Savings Plan

The Company offers a 401(k) plan to all of its employees. Company matching contributions are determined in accordance with the provisions of the Company's contribution plan. During the years ended December 31, 2008, 2007 and 2006, employer-matching cash contributions totaled $36,402, $36,042 and $33,790, respectively.

## Note 10. Concentration of Risks

The Company maintains its cash balances in one financial institution, which at times may exceed federally insured limits. As of December 31, 2008, the Company maintained approximately $2.0 million, including funds classified as restricted cash, at major financial institutions in money market accounts insured by the Securities Investor Protection Corporation up to $500,000 per account. The Company has not experienced any losses in such accounts and believes it is not exposed to any significant credit risk on cash.

A significant portion of the Company's revenue is concentrated with a limited number of customers. The following individual customers accounted for 10% or more of revenue for the years ended December 31, 2008, 2007 and 2006:

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2008 | 2007 | 2006 |
| Customer A | 44% | 48% | 41% |
| Customer B | 16 | 17 | 12 |
| Customer C | — | 14 | — |
| Customer D | 23 | 11 | — |
| Customer E | — | — | 42 |

## Note 11. Income Taxes

Significant components of the Company's gross deferred tax assets and liabilities as of December 31, 2008 and 2007 are as follows:

| | As of December 31, | |
|---|---|---|
| | 2008 | 2007 |
| Gross deferred tax assets (liabilities): | | |
| Net operating loss carryforwards | $ 8,528,900 | $ 7,179,300 |
| Stock compensation | 561,300 | 529,800 |
| Accrued expenses | 9,400 | 14,600 |
| Fixed and intangible assets | 32,600 | 23,400 |
| Gross deferred tax assets | 9,132,200 | 7,747,100 |
| Less valuation allowance | (9,132,200) | (7,747,100) |
| Net deferred tax assets | — | — |
| Deferred tax liabilities | — | — |
| Net deferred tax assets/liabilities | $ — | $ — |

Upon the adoption of FIN 48 on January 1, 2007, the Company derecognized previously recognized research and development tax credits which totaled approximately $84,000 as of December 31, 2008 and approximately $85,200 as of December 31, 2007 as it believed these deferred tax assets did not meet the more-likely-than-not recognition threshold. During 2008 and 2007, there was no interest or penalty recognized.

Due to the uncertainty of the Company's ability to generate taxable income to realize its net deferred tax assets at December 31, 2008 and 2007, a full valuation allowance has been recognized for financial reporting purposes. The Company's valuation allowance for deferred tax assets increased by $1,385,100, $1,045,400 and $1,096,500 during the years ended December 31, 2008, 2007 and 2006, respectively. The increase in the deferred tax assets in 2008 was primarily the result of increasing net operating loss carryforwards during the year.

At December 31, 2008, the Company had federal net operating loss carryforwards of approximately $25.1 million for income tax reporting purposes, which expire from 2009 to 2028. The Company's ability to utilize the carryforwards may be limited in the event of an ownership change as defined in current income tax regulations.

The Company files a Federal income tax return in the U.S. All of the Company's tax returns for years with unexpired net operating loss carryforwards may be subject to examination in the event that the Company utilizes the net operating losses from those years in its future tax returns.

## Note 12. Other Related Party Transactions

Effective as of April 18, 2007, the Company entered into a License Agreement (the License Agreement) with DermaVentures, LLC (DermaVentures), an Illinois limited liability company in which the Company owns a 25% membership interest pursuant to the DermaVentures Operating Agreement. Pursuant to the License Agreement, the Company granted to DermaVentures a non-exclusive license under certain patents and related technology to formulate certain of the Company's proprietary peptides into cosmetics and over-the-counter personal care products and to market and sell those products in North and Central America. The initial term of the License Agreement is five years. In consideration for the license, DermaVentures agreed to pay the Company royalties on its sales of products containing the Company's proprietary peptides as set forth in the License Agreement.

In addition, effective as of April 18, 2007, the Company entered into a Management Services Agreement (the Services Agreement) with DermaVentures and RMS Group, LLC, a member and the sole manager of DermaVentures (RMS). Pursuant to the Services Agreement, the Company agreed to provide certain

management services to DermaVentures in exchange for a management fee of $400,000 payable as a cash flow distribution to the Company in connection with its ownership interest in DermaVentures after $1,200,000 in cash flow is distributed to RMS. The Company may terminate the Services Agreement upon 30 days prior written notice to the other parties, at which time the Company's membership interest in DermaVentures shall be reduced to 10%; provided, however, that during the first year after the effective date, the Company may only terminate the Services Agreement for cause. Either DermaVentures or RMS may terminate the Services Agreement at any time with or without cause upon 30 days prior written notice to the Company, at which time the Company's membership interest in DermaVentures shall be reduced to 10% unless the Company agrees to bear the costs for any necessary replacement management services thereafter.

During the year ended December 31, 2008 and 2007, the Company sold $0 and $64,400, respectively, of peptides to DermaVentures. The inventory sold to DermaVentures in 2007 had zero cost as it was written down to its estimated net realizable value in the second quarter of 2006. For the year ended December 31, 2008, the Company received approximately $42,300 of administrative services revenue from DermaVentures for marketing services associated with DermaVentures' product line and other out-of-pocket expenses the Company incurred on DermaVentures' behalf. Administrative services revenue is typically invoiced to DermaVentures at or near cost and therefore has no material effect on the Company's net loss. For the year ended December 31, 2007, administrative services revenue and associated costs were not material.

### Note 13. Interests in Affiliates

As of December 31, 2008, the Company owned 25% of DermaVentures' outstanding membership units. The Company's membership interest in DermaVentures, a variable interest entity, is accounted for using the equity method because the Company is not the primary beneficiary. The Company contributed no capital to DermaVentures. The Company's membership interest in DermaVentures was received in exchange for a commitment to provide future services (see Note 12 for discussion of related Services Agreement). There were no earnings recognized by the Company in 2008 and 2007 related to its membership interest in DermaVentures because DermaVentures incurred a net loss and the Company is not required to fund DermaVentures' losses. The carrying value of the Company's membership interest in DermaVentures was zero at inception and at December 31, 2008 and 2007. The Company's exposure to loss as a result of its involvement with DermaVentures is limited to the cost of the services the Company is required to provide under the Services Agreement.

Summary unaudited financial information of DermaVentures as of December 31, 2008 and 2007 and for the year ended December 31, 2008 and the period from inception (April 13, 2007) through December 31, 2007 is as follows:

| | As of December 31, | |
|---|---|---|
| | 2008 | 2007 |
| Total assets | $394,265 | $822,920 |
| Total liabilities | 38,676 | 18,017 |

| | For the Year Ended December 31, 2008 | For the Period from Inception (April 13, 2007) through December 31, 2007 |
|---|---|---|
| Net operating revenues | $189,111 | $ 15,943 |
| Net operating expenses | 669,548 | 436,290 |
| Net loss | 529,306 | 402,730 |

## Note 14. Commitments and Contingencies

*Leases*

The Company leases office and laboratory space under an operating lease expiring in November 2009 which includes an option to extend the term of the lease for three years. Rent expense including operating costs for the years ended December 31, 2008, 2007 and 2006 was $106,892, $108,521 and $67,475, respectively. This lease agreement provides for scheduled rent increases over the lease term. Minimum rental expenses are recognized on a straight-line basis over the term of the lease. Until the Company extends the terms of, or enters into a new lease for, its office and laboratory space, the future minimum payment under the existing lease from January through November 2009 is $70,763.

*Purchase Commitments*

In August 2007, the Company entered into an agreement with Peptisyntha, Inc. for the purchase of a certain peptide over a period of eighteen months from the agreement date. The aggregate purchase requirement under this agreement over the eighteen-month period is $234,000. As of December 31, 2008, the Company had placed orders totaling approximately $131,200 under this agreement. The Company fulfilled its obligation to purchase the remaining peptide requirement of approximately $102,800 in January 2009.

## Note 15. License Agreements

The Company entered into a License Agreement (the UBC License) with the University of British Columbia (UBC) commencing October 1, 2001, (the Commencement Date), whereby UBC granted to the Company an exclusive, worldwide license to use and sublicense certain defined "Technology" and any improvements within a specified field of use and including the right to manufacture, distribute and sell products utilizing the Technology. The UBC License terminates on October 1, 2021 or upon the expiration of the last patent applied for and obtained pursuant to certain provisions of the License, unless terminated earlier in accordance with the terms of the License. Dr. Robert E.W. Hancock, Ph.D., a member of the Company's Scientific Advisory Board, is the lead investigator and inventor of the UBC patents and patent applications. The Technology is comprised primarily of three broad patents for antimicrobial peptides and related methods of use. The UBC License extends to the Company's affiliates. In exchange for the exclusive, worldwide license granted under the UBC License, the Company agreed to pay UBC a royalty of 3.5% of revenue generated from the Technology and any improvements related thereto. The Company agreed to pay graduated minimum annual royalties of $10,000 upon the 5th anniversary, $20,000 upon the 6th anniversary, and $25,000 upon the 7th and all subsequent anniversaries of the Commencement Date. As called for by the UBC License, the Company has issued to UBC or its assigns 97,500 shares of the Company's common stock, options to purchase up to 152,500 common shares at $1.50 per share, and $61,391 in cash, such cash payment constituting reimbursement of UBC for expenses related to the licensed patents. The options have a term of ten years and were fully vested upon grant. The agreement also requires the Company to reimburse UBC for all further costs incurred with respect to the patents, including maintenance fees. The Company paid UBC minimum royalties of $25,000, $20,000 and $10,000 for 2008, 2007 and 2006, respectively.

On August 16, 2007, the Company entered into a License Agreement (the Goldschmidt Agreement) with Goldschmidt GmbH, a wholly-owned subsidiary of Evonik GmbH. Pursuant to the Goldschmidt Agreement, the Company granted to Goldschmidt an exclusive license under certain Company patent applications and related rights and technology to, among other things, make and sell formulations for use as ingredients in final products in the cosmetic and non-prescription-drug fields of use. The term of the Goldschmidt Agreement extends until the expiration of the last-to-expire patent issued under the licensed patent rights, subject to certain termination rights of each party. In consideration for the license, Goldschmidt agreed to make specified upfront payments (subject to certain conditions) and to pay specified royalties on its sales of formulations under the Goldschmidt Agreement. As of December 31, 2007, the Company had recorded deferred revenue of $130,000 related to

upfront payments under the Goldschmidt Agreement. This amount was recognized as revenue in 2008 when the related obligations were satisfied.

On September 12, 2007, the Company entered into a First Amended and Restated License Agreement (the Grant Amended Agreement) with Grant Industries, Inc., which amends and restates the Non-Exclusive License Agreement between the parties dated December 12, 2006. Among other things, the amendments included in the Grant Amended Agreement render the license thereunder to a certain Company peptide exclusive, add an additional Company peptide to the scope of the license grant thereunder, also on an exclusive basis, and expand the scope of the licensed territory to include certain countries in Asia.

Effective as of December 10, 2008, the Company entered into a First Amendment to the Grant Amended Agreement, which among certain other amendments, added four additional Company proprietary peptides to the scope of the license grant under the Grant Amended Agreement on an exclusive basis (subject to certain limitations), and extended the initial term of the Grant Amended Agreement from December 31, 2009 to December 31, 2011.

## Note 16. Condensed Quarterly Financial Data (unaudited)

| | Quarter Ended | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | March 31, 2008 | June 30, 2008 | September 30, 2008 | December 31, 2008 | March 31, 2007 | June 30, 2007 | September 30, 2007 | December 31, 2007 |
| Net revenue | $ 240,370 | $ 87,245 | $ 156,539 | $ 78,723 | $ 58,422 | $ 140,654 | $ 159,368 | $ 105,497 |
| Gross profit | 132,205 | 59,388 | 57,898 | 58,010 | 58,422 | 130,233 | 85,695 | 51,099 |
| Operating expenses | 939,097 | 1,068,332 | 807,109 | 1,037,141 | 893,314 | 986,873 | 1,009,924 | 953,917 |
| Loss from operations | (806,892) | (1,008,944) | (749,211) | (979,131) | (834,892) | (856,640) | (924,229) | (902,818) |
| Other income, net | (468,106) | (439,351) | (18,503) | (45,374) | 22,403 | 25,478 | 24,461 | 12,233 |
| Net loss | $ (1,274,998) | $ (1,448,295) | $ (767,714) | $ (1,024,505) | $ (812,489) | $ (831,162) | $ (899,768) | $ (890,585) |
| Basic and diluted net loss per share | $ (0.05) | $ (0.06) | $ (0.03) | $ (0.04) | $ (0.03) | $ (0.03) | $ (0.04) | $ (0.03) |
| Weighted average shares outstanding | 25,653,512 | 25,653,512 | 25,653,512 | 25,653,512 | 23,569,902 | 25,653,512 | 25,653,512 | 25,653,512 |

## Note 17. Subsequent Events

In the first quarter of 2009, the Company completed the 2009 Note and Warrant Offering and issued the 2009 Notes in an aggregate principal amount of $3,474,000 and warrants to purchase an aggregate of 868,500 shares of the Company's common stock at an exercise price of $1.00 per share. The 2009 Notes bear interest at the rate of 8% per annum and are due and payable on July 1, 2011 unless:

(i) converted automatically

(a) upon the consummation by the Company of an equity financing with proceeds to the Company of at least $7,500,000 (Equity Financing) whereupon the 2009 Notes shall be converted automatically into shares of the Company's capital stock issued in the Equity Financing at a price equal to the lesser of the per share price of the securities issued and sold in the Equity Financing and $1.00, or

(b) upon the consummation of a sale of substantially all of the Company's assets or a merger or consolidation of the Company in which the Company's stockholders will hold, in the aggregate, less than 50% of the voting power of the combined entity whereupon the 2009 Notes shall be converted automatically into shares of the Company's common stock at a price equal to the lesser of the per share price attributed to the Company's common stock in connection with such transaction and $1.00; or

(c) upon the consummation of the sale and issuance of 2009 Notes in an aggregate principal amount of $7.5 million on terms and conditions mutually agreed upon by the Company and the holder(s) of a majority-in-interest of then-outstanding 2009 Notes;

(ii) converted voluntarily at and as of the maturity date into shares of the Company's common stock at a price equal to $1.00;

(iii) the Company defaults under the 2009 Notes, in which event the 2009 Notes shall become immediately due and payable.

The Vice President and Treasurer of Cardinal Court LLC, which purchased a note in the principal amount of $2.0 million and received a warrant to purchase up to 500,000 shares of the Company's common stock in the 2009 Note and Warrant Offering, is Frank T. Nickell, who beneficially owned approximately 29.5% of the Company's outstanding Common Stock as of March 19, 2009.

## ITEM 9A(T). *CONTROLS AND PROCEDURES*

### Disclosure Controls and Procedures

We carried out an evaluation, under the supervision and with the participation of our senior management, including our Chief Executive Officer and Acting Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this report. Based upon that evaluation, our Chief Executive Officer and Acting Chief Financial Officer concluded that our disclosure controls and procedures are effective in timely alerting them to material information required to be included in our periodic SEC filings.

### Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) and Rule 15d-15(f) under the Exchange Act). Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2008. In making this assessment, our management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control-Integrated Framework.* Based on this assessment, our management concluded that our internal control over financial reporting was effective as of December 31, 2008.

Internal control over financial reporting is a process to provide reasonable assurance regarding the reliability of our financial reporting for external purposes in accordance with accounting principles generally accepted in the United States of America. Internal control over financial reporting includes maintaining records that in reasonable detail accurately and fairly reflect our transactions; providing reasonable assurance that transactions are recorded as necessary for preparation of our financial statements; providing reasonable assurance that receipts and expenditures of company assets are made in accordance with management authorization; and providing reasonable assurance that unauthorized acquisition, use or disposition of company assets that could have a material effect on our financial statements would be prevented or detected on a timely basis. Because of its inherent limitations, internal control over financial reporting is not intended to provide absolute assurance that a misstatement of our financial statements would be prevented or detected.

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

### Changes in Internal Control over Financial Reporting

There has been no change in our internal control over financial reporting during the fourth quarter of 2008 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

## PART III

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

Certain information required by this item is incorporated by reference to the section captioned "Proposal No. 1 — Election of Directors" in the Proxy Statement for our 2009 Annual Meeting of Stockholders.

The remaining information required by this item is set forth in Part I of this report under Item 1, "Business — Executive Officers of the Registrant."

### ITEM 11. *EXECUTIVE COMPENSATION*

The information required by this item is incorporated by reference to the sections captioned "Compensation of Executive Officers" and "Proposal No. 1 — Election of Directors" of the Proxy Statement for our 2009 Annual Meeting of Stockholders.

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

Certain information required by this item is incorporated by reference to the section captioned "Security Ownership of Certain Beneficial Owners and Management" of the Proxy Statement for our 2009 Annual Meeting of Stockholders.

**Securities Authorized For Issuance Under Equity Compensation Plans**

The following table lists our equity compensation plans, including individual compensation arrangements, under which equity securities are authorized for issuance as of December 31, 2008:

| | (a) Number of securities to be issued upon exercise of outstanding options, warrants and rights | (b) Weighted-average exercise price of outstanding options, warrants and rights | (c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) |
|---|---|---|---|
| Equity compensation plans approved by security holders | 3,305,194 | $1.17 | 2,049,806 |
| Equity compensation plans not approved by security holders(1) | 3,450,544 | $1.30 | — |
| Total | 6,755,738 | $1.24 | 2,049,806 |

(1) Consists of warrants to purchase common stock issued to certain employees and consultants in connection with services rendered and to certain shareholders in connection with financing activities.

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

The information required by this Item is incorporated by reference from the information contained in the sections captioned "Certain Relationships and Related Transactions" and "Proposal No. 1 — Election of Directors" of the Proxy Statement for our 2009 Annual Meeting of Stockholders.

### ITEM 14. *PRINCIPAL ACCOUNTANT FEES AND SERVICES*

The information required by this item is incorporated by reference to the section captioned "Proposal No. 2 — Ratify Appointment of Independent Registered Public Accounting Firm" of the Proxy Statement for our 2009 Annual Meeting of Stockholders.

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

1. Financial Statements. See "Index to Financial Statements" in Part II, Item 8 of this Annual Report on Form 10-K.

2. Exhibits. The exhibits listed in the accompanying "Index to Exhibits" are filed or incorporated by reference as part of this Annual Report on Form 10-K.

| Exhibit No. | Description and Location |
|---|---|
| 2.1 | Proposal for Approval of Reincorporation of Helix BioMedix, Inc., a Colorado corporation, from Colorado to Delaware (incorporated by reference to Exhibit 2 to the Company's Annual Report on Form 10-KSB filed with the Securities and Exchange Commission on April 16, 2001) |
| 3.1 | Certificate of Ownership and Merger of Helix BioMedix, Inc. a Delaware corporation and Helix BioMedix, Inc., a Louisiana corporation (incorporated by reference to Exhibit 3.1 to the Company's Annual Report on Form 10-KSB filed with the Securities and Exchange Commission on April 16, 2001) |
| 3.2 | Certificate of Incorporation of Helix BioMedix, Inc. (incorporated by reference to Exhibit 3-A to the Company's Annual Report on Form 10-KSB/A filed with the Securities and Exchange Commission on April 30, 2003) |
| 3.3 | Certificate of Amendment to the Certificate of Incorporation of Helix BioMedix, Inc. (incorporated by reference to Exhibit 3.3 to the Company's Annual Report on Form 10-KSB/A filed with the Securities and Exchange Commission on April 30, 2003) |
| 3.4 | Bylaws of Helix BioMedix, Inc. (incorporated by reference to Exhibit 3-B to the Company's Annual Report on Form 10-KSB filed with the Securities and Exchange Commission on April 16, 2001) |
| 4.1 | Rights Agreement dated August 21, 2003 (incorporated by reference to Exhibit 10.27 to the Company's Annual Report on Form 10-KSB filed with the Securities and Exchange Commission on March 26, 2004) |
| 4.2 | Acceptance and Acknowledgement of Appointment dated January 4, 2004 (incorporated by reference to Exhibit 10.28 to the Company's Annual Report on Form 10-KSB filed with the Securities and Exchange Commission on March 26, 2004) |
| 10.1† | Helix BioMedix, Inc. Amended and Restated 2000 Stock Option Plan (incorporated by reference to Exhibit 10.5 to the Company's Annual Report on Form 10-KSB/A filed with the Securities and Exchange Commission on April 30, 2003) |
| 10.1(a)† | Form of Helix BioMedix, Inc. Stock Option Agreement for Purchase of Stock (incorporated by reference to Annex A to Exhibit 10.5 to the Company's Annual Report on Form 10-KSB/A filed with the Securities and Exchange Commission on April 30, 2003) |
| 10.2† | Employment Agreement dated September 24, 2003, effective July 1, 2003, between the Company and R. Stephen Beatty (incorporated by reference to Exhibit 10.9 to the Company's Annual Report on Form 10-KSB filed with the Securities and Exchange Commission on March 26, 2004) |
| 10.2(a)† | Amendment to Employment Agreement dated December 10, 2003 between the Company and R. Stephen Beatty (incorporated by reference to Exhibit 10.13 to the Company's Annual Report on Form 10-KSB filed with the Securities and Exchange Commission on March 26, 2004) |
| 10.2(b)† | Second Amendment to Employment Agreement dated effective as of June 30, 2006 between the Company and R. Stephen Beatty (incorporated by reference to Exhibit 10.9(a) to the Company's Quarterly Report on Form 10-QSB filed with the Securities and Exchange Commission on November 9, 2006) |
| 10.2(c)† | Third Amendment to Employment Agreement dated effective as of June 15, 2007 between the Company and R. Stephen Beatty (incorporated by reference to Exhibit 10.9(b) to the Company's Quarterly Report on Form 10-QSB filed with the Securities and Exchange Commission on November 8, 2007) |

| Exhibit No. | Description and Location |
|---|---|
| 10.3† | Employment Agreement dated September 24, 2003, effective July 1, 2003, between the Company and Timothy Falla (incorporated by reference to Exhibit 10.8 to the Company's Annual Report on Form 10-KSB filed with the Securities and Exchange Commission on March 26, 2004) |
| 10.3(a)† | Amendment to Employment Agreement dated December 10, 2003 between the Company and Timothy Falla (incorporated by reference to Exhibit 10.12 to the Company's Annual Report on Form 10-KSB filed with the Securities and Exchange Commission on March 26, 2004) |
| 10.3(b)† | Second Amendment to Employment Agreement dated effective as of June 30, 2006 between the Company and Timothy Falla (incorporated by reference to Exhibit 10.8(a) to the Company's Quarterly Report on Form 10-QSB filed with the Securities and Exchange Commission on November 9, 2006) |
| 10.3(c)† | Third Amendment to Employment Agreement dated effective as of June 15, 2007 between the Company and Timothy Falla (incorporated by reference to Exhibit 10.8(b) to the Company's Quarterly Report on Form 10-QSB filed with the Securities and Exchange Commission on November 8, 2007) |
| 10.4† | Employment Letter Agreement dated June 30, 2004 between the Company and David H. Kirske (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-QSB filed with the Securities and Exchange Commission on November 12, 2004) |
| 10.4(a)† | First Amendment to Employment Letter Agreement dated effective as of June 15, 2007 between the Company and David H. Kirske (incorporated by reference to Exhibit 10.10(a) to the Company's Quarterly Report on Form 10-QSB filed with the Securities and Exchange Commission on November 8, 2007) |
| 10.5† | Employment Letter Agreement dated October 8, 2007 between the Company and Robin L. Carmichael (incorporated by reference to Exhibit 10.28 to the Company's Quarterly Report on Form 10-QSB filed with the Securities and Exchange Commission on November 8, 2007) |
| 10.5(a)† | First Amendment to Employment Letter Agreement dated effective as of November 15, 2007 between the Company and Robin L. Carmichael (incorporated by reference to Exhibit 10.5(a) to the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 21, 2008) |
| 10.5(b)† | Second Amendment to Employment Letter Agreement dated effective as of June 30, 2008 between the Company and Robin L. Carmichael (incorporated by reference to Exhibit 10.5(b) to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on July 30, 2008) |
| 10.6† | Employment Letter Agreement August 12, 2004 between the Company and David Drajeske dated (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-QSB filed with the Securities and Exchange Commission on November 12, 2004) |
| 10.7† | Separation Agreement and Release dated October 12, 2006 between the Company and David Drajeske (incorporated by reference to Exhibit 10.23 to the Company's Quarterly Report on Form 10-QSB filed with the Securities and Exchange Commission on November 9, 2006) |
| 10.8† | Employment Letter Agreement dated effective as of October 1, 2006 between the Company and Lori Bush (incorporated by reference to Exhibit 10.22 to the Company's Quarterly Report on Form 10-QSB filed with the Securities and Exchange Commission on November 9, 2006) |
| 10.9 | University of British Columbia License Agreement dated October 1, 2001 (incorporated by reference to Exhibit 10.5 to the Company's Annual Report on Form 10-KSB filed with the Securities and Exchange Commission on April 1, 2002) |
| 10.10 | Lease between the Company and Teachers Insurance & Annuity Association of America, Inc. dated August 14, 2001 (incorporated by reference to Exhibit 10.11 to the Company's Annual Report on Form 10-KSB filed with the Securities and Exchange Commission on April 1, 2002) |

| Exhibit No. | Description and Location |
|---|---|
| 10.10(a) | First Amendment to Lease between the Company and Teachers Insurance and Annuity Association of America, Inc. dated December 6, 2005 (incorporated by reference to Exhibit 10.17(a) to the Company's Annual Report on Form 10-KSB filed with the Securities and Exchange Commission on March 27, 2006) |
| 10.10(b) | Second Amendment to Lease between the Company and Teachers Insurance and Annuity Association of America, Inc. dated October 4, 2006 (incorporated by reference to Exhibit 10.17b to the Company's Annual Report on Form 10-KSB filed with the Securities and Exchange Commission on March 26, 2007) |
| 10.11* | Joint Marketing Agreement between the Company and Body Blue Inc. dated November 2, 2004 (incorporated by reference to Exhibit 10.21 to the Company's Annual Report on Form 10-KSB filed with the Securities and Exchange Commission on March 31, 2005) |
| 10.11(a)* | First Amendment to Joint Marketing Agreement between the Company and Body Blue Inc. dated February 13, 2006 (incorporated by reference to Exhibit 10.21(a) to the Company's Annual Report on Form 10-KSB filed with the Securities and Exchange Commission on March 27, 2006) |
| 10.12* | Non-Exclusive License Agreement dated December 12, 2006 between the Company and Grant Industries, Inc. (incorporated by reference to Exhibit 10.24 to the Company's Annual Report on Form 10-KSB filed with the Securities and Exchange Commission on March 26, 2007) |
| 10.12(a)* | First Amended and Restated License Agreement dated September 12, 2007 between the Company and Grant Industries, Inc. (incorporated by reference to Exhibit 10.24(a) to the Company's Quarterly Report on Form 10-QSB filed with the Securities and Exchange Commission on November 8, 2007) |
| 10.12(b)* | First Amendment to First Amended and Restated License Agreement dated effective as of December 10, 2008 between the Company and Grant Industries, Inc. |
| 10.13* | License Agreement dated effective as of April 18, 2007 between the Company and DermaVentures, LLC (incorporated by reference to Exhibit 10.25 to the Company's Quarterly Report on Form 10-QSB filed with the Securities and Exchange Commission on May 10, 2007) |
| 10.14 | Management Services Agreement dated effective as of April 18, 2007 between the Company, DermaVentures, LLC and RMS Group, LLC (incorporated by reference to Exhibit 10.26 to the Company's Quarterly Report on Form 10-QSB filed with the Securities and Exchange Commission on May 10, 2007) |
| 10.15* | License Agreement dated August 16, 2007 between the Company and Goldschmidt GmbH (incorporated by reference to Exhibit 10.27 to the Company's Quarterly Report on Form 10-QSB filed with the Securities and Exchange Commission on November 8, 2007) |
| 10.16* | Manufacturing and Supply Agreement dated as of January 9, 2008 between the Company and Peptisyntha, Inc. (incorporated by reference to Exhibit 10.16 to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 15, 2008) |
| 10.17(a) | Convertible Note and Warrant Purchase Agreement dated as of February 14, 2008 between the Company and RBFSC, Inc. (incorporated by reference to Exhibit 10.17(a) to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 15, 2008) |
| 10.17(b) | Convertible Promissory Note dated as of February 14, 2008 between the Company and RBFSC, Inc. (incorporated by reference to Exhibit 10.17(b) to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 15, 2008) |
| 10.17(c) | First Amendment to Note and Warrant Purchase Agreement and Convertible Promissory Note dated as of June 27, 2008 between the Company and RBFSC, Inc. (incorporated by reference to Exhibit 10.17(c) to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on July 30, 2008) |
| 10.18* | License Agreement dated August 27, 2008 between the Company and Rodan & Fields, LLC (incorporated by reference to Exhibit 10.18 to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 5, 2008) |

| Exhibit No. | Description and Location |
|---|---|
| 23.1 | Consent of KPMG LLP |
| 31.1 | Certification of the Company's Chief Executive Officer Pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934 |
| 31.2 | Certification of the Company's Chief Financial Officer Pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934 |
| 32.1 | Certification of the Company's Chief Executive Officer Pursuant to 18 U.S.C. Section 1350 |
| 32.2 | Certification of the Company's Chief Financial Officer Pursuant to 18 U.S.C. Section 1350 |

† Indicates a management contract or compensatory plan or arrangement.

* Confidential treatment has been requested for confidential commercial and financial information, pursuant to Rule 24b-2 under the Securities Exchange Act of 1934, as amended.

## SIGNATURES

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

HELIX BIOMEDIX, INC.
(Registrant)

By: /s/ R. Stephen Beatty

R. Stephen Beatty
*President, Chief Executive Officer and Acting Chief Financial Officer*
*(Principal Executive Officer and Principal Financial Officer)*

Date: March 26, 2009

## POWER OF ATTORNEY

Each person whose signature appears below hereby constitutes and appoints R. Stephen Beatty his or her true and lawful attorney-in-fact and agent, with full power to act, and with full power of substitution and resubstitution, to execute in his or her name and on his or her behalf, individually and in each capacity stated below, any and all amendments and supplements to this Annual Report, and any and all other instruments necessary or incidental in connection herewith, and to file the same with the Securities and Exchange Commission.

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

| Signature | Title | Date |
|---|---|---|
| /s/ R. STEPHEN BEATTY<br>R. Stephen Beatty | President, Chief Executive Officer,<br>Acting Chief Financial Officer and Director | March 26, 2009 |
| /s/ RANDALL L-W. CAUDILL, PH.D.<br>Randall L-W. Caudill, Ph.D. | Director | March 26, 2009 |
| /s/ JOHN F. CLIFFORD<br>John F. Clifford | Director | March 26, 2009 |
| /s/ RICHARD M. COHEN<br>Richard M. Cohen | Director | March 26, 2009 |
| /s/ JOHN C. FIDDES, PH.D.<br>John C. Fiddes, Ph.D. | Director | March 26, 2009 |
| /s/ JEFFREY A. MILLER, PH.D.<br>Jeffrey A. Miller, Ph.D. | Director | March 26, 2009 |
| /s/ DAVID O'CONNOR<br>David O'Connor | Director | March 26, 2009 |
| /s/ BARRY L. SEIDMAN<br>Barry L. Seidman | Director | March 26, 2009 |
| /s/ DANIEL O. WILDS<br>Daniel O. Wilds | Director | March 26, 2009 |

**Supplemental Information to be Furnished With Reports Filed Pursuant to Section 15(d) of the Act by Registrants Which Have Not Registered Securities Pursuant to Section 12 of the Act**

No annual report, proxy statement, form of proxy or other proxy soliciting material has been sent to security holders of the registrant. The registrant's annual report and proxy soliciting material will be furnished to security holders in connection with the registrant's 2009 annual meeting of stockholders, and such material will be furnished to the Securities and Exchange Commission when it is sent to security holders.

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# Corporate Information

## Board of Directors

R. Stephen Beatty
*President and Chief Executive Officer; Acting Chief Financial Officer, Helix BioMedix, Inc.*

Randall L-W. Caudill, D.Phil.
*President, Dunsford Hill Capital Partners, Inc.; Director, SCOLR Pharma, Inc.*

John F. Clifford
*Former: President and CEO, Procyte Corporation, and President, Orthofix, Inc. U.S.*

Richard M. Cohen, CPA
*President, Richard M. Cohen Consultants, Inc.*

John Fiddes, Ph.D
*Former: Vice President of Research, Health Care, Genencor International, Inc; CEO, Tao Biosciences, LLC; and CTO & VP Preclinical Research, IntraBiotics Pharmaceuticals, Inc.*

Jeffrey A. Miller, Ph.D
*President and CEO, Capital Markets Research, Inc., Gas-Lock Advisors, LLC and New Arc Investments, Inc.*

David O'Connor
*Consultant, Westfield Consultants Group; Former: President, Merle Norman Cosmetics International*

Barry L. Seidman
*Chairman, Pax Holding Corporation;*
*Former: President & COO, First Options of Chicago; and Partner, Spear, Leeds & Kellogg*

Daniel O. Wilds
*Former: President and CEO, SCOLR Pharma, Inc.; President, Northwest Biotherapeutics, Inc.; President & CEO, Shiloov Biotechnologies (USA), Inc.*

## Management Team

R. Stephen Beatty
*President and Chief Executive Officer; Acting Chief Financial Officer*

Timothy Falla, Ph.D
*Vice President and Chief Scientific Officer*

Robin Carmichael
*Vice President of Marketing and Business Development*

## Independent Auditors

KPMG LLP
801 Second Avenue, Suite 900
Seattle, WA 98104

## Company Headquarters

Helix BioMedix, Inc.
22118 20th Avenue SE, Suite 204
Bothell, WA 98021
T: 425-402-8400
F: 425-806-2999
www.helixbiomedix.com

## Legal Counsel

Summit Law Group, PLLC
315 Fifth Avenue South, Suite 1000
Seattle, WA 98104

## Transfer Agent

Computershare Trust Company
250 Royall Street
Canton, MA 02021
T: 303-262-0600

## Annual Meeting

8:00 a.m. on May 14, 2009
Country Inn & Suites
19333 North Creek Parkway
Bothell, WA 98011

## Investor Relations

The investing public, securities analysts and stockholders seeking information about our company should visit the Investor Information section of our corporate website at www.helixbiomedix.com, or contact Ryan Bright of Shelton Group at: 972-239-5119 x159.

## Forward-Looking Statements

This Annual Report contains forward-looking statements regarding Helix BioMedix, Inc. (statements which are not historical facts) within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements include statements regarding activities, events or developments that Helix BioMedix, Inc. expects, believes or anticipates may occur in the future, including statements related to its potential growth, product development and commercialization and revenue. A number of factors could cause actual results to differ from those indicated in the forward-looking statements, including the company's ability to successfully raise additional capital, continue its research and development efforts, including pre-clinical and clinical studies, continue developing marketable peptide-based products and general economic conditions. Additional assumptions, risks and uncertainties are described in detail in the company's reports and other filings with the Securities and Exchange Commission. Such filings are available on the Helix BioMedix, Inc. website or at www.sec.gov. Readers are cautioned that such forward-looking statements are not guarantees of future performance and that actual results or developments may differ materially from those set forth in the forward-looking statements. Helix BioMedix, Inc. undertakes no obligation to publicly update or revise forward-looking statements to reflect subsequent events or circumstances.

HELIX BIOMEDIX®

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