INTERNATIONAL TOWER HILL MINES LTD
Form 10-Q
August 10, 2018

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

x **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the quarterly period ended June 30, 2018
OR
TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to

Commission file number: 001-33638

INTERNATIONAL TOWER HILL MINES LTD.

(Exact Name of Registrant as Specified in its Charter)

British Columbia, Canada	**N/A**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
2300-1177 West Hastings Street **Vancouver, British Columbia, Canada, V6E 2K3**	**V6E 2K3**
(Address of Principal Executive Offices)	(Zip code)

Registrant's telephone number, including area code: (604) 683-6332

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes x No ¨

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes x No ¨

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

Large accelerated filer ¨	Accelerated filer ¨
Non-accelerated filer ¨	
	Smaller reporting company x
(Do not check if a smaller reporting company)	
	Emerging growth company ¨

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ¨

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

As of August 2, 2018, the registrant had 186,816,683 common shares outstanding.

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CAUTIONARY NOTE TO U.S. INVESTORS REGARDING ESTIMATES OF MEASURED, INDICATED AND INFERRED RESOURCES AND PROVEN AND PROBABLE RESERVES

International Tower Hill Mines Ltd. (“we”, “us”, “our,” “ITH” or the “Company”) is a mineral exploration company engaged i the acquisition and exploration of mineral properties. As used in this Quarterly Report on Form 10-Q, the terms “mineral reserve”, “proven mineral reserve” and “probable mineral reserve” are Canadian mining terms as defined in accordance with Canadian National Instrument 43-101—Standards of Disclosure for Mineral Projects (“NI 43-101”) and the Canadian Institute of Mining, Metallurgy and Petroleum (the “CIM”)—CIM Definition Standards on Mineral Resources and Mineral Reserves, adopted by the CIM Council, as amended. These definitions differ from the definitions in the United States Securities and Exchange Commission (“SEC”) Industry Guide 7 (“SEC Industry Guide 7”). Under SEC Industry Guide 7 standards, a “final” or “bankable” feasibility study is required to report reserves, the three-year historical average price is used in any reserve or cash flow analysis to designate reserves, and the primary environmental analysis or report must be filed with the appropriate governmental authority. In addition, the terms “mineral resource”, “measured mineral resource”, “indicated mineral resource” and “inferred mineral resource” are defined in and required to be disclosed by NI 43-101; however, these terms are not defined terms under SEC Industry Guide 7 and are normally not permitted to be used in reports and registration statements filed with the SEC. Investors are cautioned not to assume that all or any part of a mineral deposit in these categories will ever be converted into reserves.

“Inferred mineral resources” have a great amount of uncertainty as to their existence, and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all, or any part, of an inferred mineral resource will ever be upgraded to a higher category. Under Canadian rules, estimates of inferred mineral resources may not form the basis of feasibility or pre-feasibility studies, except in rare cases. Investors are cautioned not to assume that all or any part of an inferred mineral resource exists or is economically or legally mineable.

Disclosure of “contained ounces” in a resource is permitted disclosure under Canadian regulations if such disclosure includes the grade or quality and the quantity for each category of mineral resource and mineral reserve; however, the SEC normally only permits issuers to report mineralization that does not constitute “reserves” by SEC standards as in place tonnage and grade without reference to unit measures. Accordingly, information contained in this report and the documents incorporated by reference herein contain descriptions of our mineral deposits that may not be comparable to similar information made public by U.S. companies subject to the reporting and disclosure requirements under U.S. federal securities laws and the rules and regulations thereunder.

The term “mineralized material” as used in this Quarterly Report on Form 10-Q, although permissible under SEC Industry Guide 7, does not indicate “reserves” by SEC Industry Guide 7 standards. We cannot be certain that any part of the mineralized material will ever be confirmed or converted into SEC Industry Guide 7 compliant “reserves”. Investors are cautioned not to assume that all or any part of the mineralized material will ever be confirmed or converted into reserves or that mineralized material can be economically or legally extracted.

CAUTIONARY NOTE TO ALL INVESTORS CONCERNING ECONOMIC ASSESSMENTS THAT INCLUDE INFERRED RESOURCES

The Company currently holds or has the right to acquire interests in an advanced stage exploration project in Alaska referred to as the Livengood Gold Project (the "Livengood Gold Project" or the "Project"). Mineral resources that are not mineral reserves have no demonstrated economic viability. The preliminary assessments on the Project are preliminary in nature and include "inferred mineral resources" that have a great amount of uncertainty as to their existence, and are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves. It cannot be assumed that all, or any part, of an inferred mineral resource will ever be upgraded to a higher category. Under Canadian rules, estimates of inferred mineral resources may not form the basis of feasibility or pre-feasibility studies. There is no certainty that such inferred mineral resources at the Project will ever be realized. Investors are cautioned not to assume that all or any part of an inferred mineral resource exists or is economically or legally mineable.

FORWARD LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements or information within the meaning of the United States Private Securities Litigation Reform Act of 1995 concerning anticipated results and developments in the operations of the Company in future periods, planned exploration activities, the adequacy of the Company's financial resources and other events or conditions that may occur in the future. Forward-looking statements are frequently, but not always, identified by words such as "expects," "anticipates," "believes," "intends," "estimates," "potential," "possible" and similar expressions, or statements that events, conditions or results "will," "may," "could" or "should" (or the negative and grammatical variations of any of these terms) occur or be achieved. These forward-looking statements may include, but are not limited to, statements concerning:

- the Company's future cash requirements, the Company's ability to meet its financial obligations as they come due, and the Company's ability to raise the necessary funds to continue operations on acceptable terms, if at all;
- the potential to improve the block model or production schedule at the Livengood Gold Project;
- the potential for opportunities to improve recovery or further reduce costs at the Livengood Gold Project;
- the Company's ability to potentially include the results of the optimization process in a new or updated feasibility study or any future financial analysis of the Project, and the estimated cost of such optimization process;
- the Company's ability to carry forward and incorporate into future engineering studies of the Project updated mine design, production schedule, and recovery concepts identified during the optimization process;
- the potential for the Company to carry out an engineering phase that will evaluate and optimize the Project configuration and capital and operating expenses, including determining the optimum scale for the Project;
- the Company's strategies and objectives, both generally and specifically in respect of the Livengood Gold Project;
- the Company's belief that there are no known environmental issues that are anticipated to materially impact the Company's ability to conduct mining operations at the Project;
- the potential for the expansion of the estimated resources at the Livengood Gold Project;
- the potential for a production decision concerning, and any production at, the Livengood Gold Project;
- the sequence of decisions regarding the timing and costs of development programs with respect to, and the issuance of the necessary permits and authorizations required for, the Livengood Gold Project;
- the Company's estimates of the quality and quantity of the resources at the Livengood Gold Project;
- the timing and cost of any future exploration programs at the Livengood Gold Project, and the timing of the receipt of results therefrom; and
- future general business and economic conditions, including changes in the price of gold and the overall sentiment of the markets for public equity.

Such forward-looking statements reflect the Company's current views with respect to future events and are subject to certain known and unknown risks, uncertainties and assumptions. Many factors could cause actual results, performance or achievements to be materially different from any future results, performance or achievements that may be expressed or implied by such forward-looking statements, including, among others:

- the demand for, and level and volatility of the price of, gold;

- conditions in the financial markets generally, the overall sentiment of the markets for public equity, interest rates and currency rates;
- general business and economic conditions;
- government regulation and proposed legislation (and changes thereto or interpretations thereof);
- defects in title to claims, or the ability to obtain surface rights, either of which could affect the Company's property rights and claims;
- the Company's ability to secure the necessary services and supplies on favorable terms in connection with its programs at the Livengood Gold Project and other activities;
- the Company's ability to attract and retain key staff, particularly in connection with the permitting and development of any mine at the Livengood Gold Project;
- the accuracy of the Company's resource estimates (including with respect to size and grade) and the geological, operational and price assumptions on which these are based;
- the timing of the ability to commence and complete planned work programs at the Livengood Gold Project;
- the timing of the receipt of and the terms of the consents, permits and authorizations necessary to carry out exploration and development programs at the Livengood Gold Project and the Company's ability to comply with such terms on a safe and cost-effective basis;
- the ongoing relations of the Company with the lessors of its property interests and applicable regulatory agencies;

- the metallurgy and recovery characteristics of samples from certain of the Company's mineral properties and whether such characteristics are reflective of the deposit as a whole; and
- the continued development of and potential construction of any mine at the Livengood Gold Project property not requiring consents, approvals, authorizations or permits that are materially different from those identified by the Company.

Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described herein. This list is not exhaustive of the factors that may affect any of the Company's forward-looking statements. Forward-looking statements are statements about the future and are inherently uncertain, and actual achievements of the Company or other future events or conditions may differ materially from those reflected in the forward-looking statements due to a variety of risks, uncertainties and other factors, including without limitation those discussed in Part I, Item 1A, Risk Factors, of our Annual Report on Form 10-K for the year ended December 31, 2017, which are incorporated herein by reference, as well as other factors described elsewhere in this report and the Company's other reports filed with the SEC.

The Company's forward-looking statements contained in this Quarterly Report on Form 10-Q are based on the beliefs, expectations and opinions of management as of the date of this report. The Company does not assume any obligation to update forward-looking statements if circumstances or management's beliefs, expectations or opinions should change, except as required by law. For the reasons set forth above, investors should not attribute undue certainty to or place undue reliance on forward-looking statements.

PART 1

ITEM 1. FINANCIAL STATEMENTS

INTERNATIONAL TOWER HILL MINES LTD.

CONDENSED CONSOLIDATED INTERIM BALANCE SHEETS

As at June 30, 2018 and December 31, 2017

(Expressed in US Dollars - Unaudited)

	Note	June 30, 2018	**December 31, 2017**
ASSETS			
Current			
Cash and cash equivalents		$12,113,995	$2,244,466
Prepaid expenses and other		198,893	177,730
Total current assets		12,312,888	2,422,196
Property and equipment		19,270	20,794
Capitalized acquisition costs	4	55,204,041	55,204,041
Total assets		$67,536,199	$57,647,031
LIABILITIES AND SHAREHOLDERS' EQUITY			
Current liabilities			
Accounts payable		$23,161	$82,269
Accrued liabilities	5	360,474	346,569
Total liabilities		383,635	428,838
Shareholders' equity			
Share capital, no par value; authorized 500,000,000 shares; 162,392,996 and 186,816,683 shares issued and outstanding at December 31, 2017 and June 30, 2018, respectively	7	277,748,250	265,616,642
Contributed surplus		34,573,493	34,459,264
Obligation to issue shares		-	63,593
Accumulated other comprehensive income		1,459,121	1,686,359
Deficit		(246,628,300)	(244,607,665)
Total shareholders' equity		67,152,564	57,218,193

Total liabilities and shareholders' equity	$67,536,199	$57,647,031

General Information and Nature of Operations (Note 1)

Commitments (Note 9)

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

INTERNATIONAL TOWER HILL MINES LTD.

CONDENSED CONSOLIDATED INTERIM STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS

For the Three and Six Months Ended June 30, 2018 and 2017

(Expressed in US Dollars - Unaudited)

		Three Months Ended		Six Months Ended	
	Note	June 30, 2018	June 30, 2017	June 30, 2018	June 30, 2017
Operating expenses					
Consulting fees		$26,195	$74,080	$79,910	$146,775
Depreciation		762	998	1,524	1,997
Insurance		36,503	68,738	107,953	134,733
Investor relations		26,893	34,751	45,400	63,248
Mineral property exploration	4	706,115	668,389	910,327	1,379,505
Office		9,444	13,008	18,908	21,149
Other		4,095	5,411	8,376	9,948
Professional fees		50,308	64,899	102,271	115,118
Regulatory		20,486	17,397	79,169	74,696
Rent		33,933	35,445	67,865	70,794
Travel		12,026	16,278	30,315	47,731
Wages and benefits		350,447	579,570	878,110	1,035,984
Total operating expenses		(1,277,207)	(1,578,964)	(2,330,128)	(3,101,678)
Other income (expenses)					
(Loss)/gain on foreign exchange		239,726	(78,001)	212,279	(244,125)
Interest income		41,066	7,119	42,429	17,980
Other income		41,000	22,200	54,785	22,200
Total other income (expenses)		321,792	(48,682)	309,493	(203,945)
Net loss for the period		(955,415)	(1,627,646)	(2,020,635)	(3,305,623)
Other comprehensive income (loss)					
Unrealized gain/(loss) on marketable securities		1,559	(6,349)	(1,526)	(4,385)
Exchange difference on translating foreign operations		(250,574)	91,303	(225,712)	256,318
Total other comprehensive income (loss) for the period		(249,015)	84,954	(227,238)	251,933
Comprehensive loss for the period		$(1,204,430)	$(1,542,692)	$(2,247,873)	$(3,053,690)
Basic and diluted loss per share		$(0.01)	$(0.01)	$(0.01)	$(0.02)
Weighted average number of shares outstanding – basic and diluted		186,698,298	162,186,972	177,002,395	162,186,972

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

INTERNATIONAL TOWER HILL MINES LTD.

CONDENSED CONSOLIDATED INTERIM STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

For the Six Months Ended June 30, 2018 and 2017

(Expressed in US Dollars - Unaudited)

	Number of shares	Share capital	Contributed surplus	Obligation to issue shares	Accumulated other comprehensive income	Deficit	Total
Balance, December 31, 2016	162,186,972	$265,569,796	$34,079,301	$-	$1,344,219	$(238,175,608)	$62,817,708
Share issuance costs	-	(45,000)	-	-	-	-	(45,000)
Stock-based compensation-options	-	-	13,127	-	-	-	13,127
Obligation to issue shares	-	-		99,492	-	-	99,492
Unrealized gain/(loss) on available-for-sale securities	-	-	-	-	(4,385)	-	(4,385)
Exchange difference on translating foreign operations	-	-	-	-	256,318	-	256,318
Net loss	-	-	-	-	-	(3,305,623)	(3,305,623)
Balance, June 30, 2017	162,186,972	265,524,796	34,092,428	99,492	1,596,152	(241,481,231)	59,831,637
Stock-based compensation-options	-	-	48,871	-	-	-	48,871
Stock-based compensation-DSUs	-	-	381,558	-	-	-	381,558
Unrealized gain/(loss) on available-for-sale securities	-	-	-	-	(4,132)	-	(4,132)
Exchange difference on translating foreign operations	-	-	-	-	94,339	-	94,339
Obligation to issue shares	-	-	(63,593)	(35,899)	-	-	(99,492)
Share issuance	206,024	99,492	-	-	-	-	99,492
Share issuance costs	-	(7,646)	-	-	-	-	(7,646)
Net loss	-	-	-	-	-	(3,126,434)	(3,126,434)
Balance, December 31, 2017	162,392,996	265,616,642	34,459,264	63,593	1,686,359	(244,607,665)	57,218,193
Stock-based compensation-options	-	-	179,265	-	-	-	179,265

Unrealized gain/(loss) on available-for-sale securities	-	-	-	-	(1,526)	-	(1,526)
Exchange difference on translating foreign operations	-	-	-	-	(225,712)	-	(225,712)
Obligation to issue shares	-	-	-	(63,593)	-	-	(63,593)
Share issuance	24,129,687	12,063,593	-	-	-	-	12,063,593
Share issuance costs	-	(111,379)	-	-	-	-	(111,379)
Exercise of options	294,000	114,358	-	-	-	-	114,358
Reallocation from contributed surplus	-	65,036	(65,036)	-	-	-	-
Net loss	-	-	-	-	-	(2,020,635)	(2,020,635)
Balance, June 30, 2018	186,816,683	$277,748,250	$34,573,493	$-	$1,459,121	$(246,628,300)	$67,152,564

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

INTERNATIONAL TOWER HILL MINES LTD.

CONDENSED CONSOLIDATED INTERIM STATEMENTS OF CASH FLOWS

For the Six Months Ended June 30, 2018 and 2017

(Expressed in US Dollars - Unaudited)

	Six Months Ended	
	June 30, 2018	June 30, 2017
Operating Activities		
Loss for the period	$(2,020,635)	$(3,305,623)
Add items not affecting cash:		
Depreciation	1,524	1,997
Stock-based compensation	179,265	13,127
Obligation to issue shares	-	99,492
Changes in non-cash items:		
Prepaid expenses and other	(28,989)	(148,207)
Accounts payable and accrued liabilities	(42,852)	(124,900)
Cash used in operating activities	(1,911,687)	(3,464,114)
Financing Activities		
Issuance of shares	12,114,358	-
Derivative payment	-	(14,694,169)
Share issuance costs	(111,379)	(45,000)
Cash provided by (used in) financing activities	12,002,979	(14,739,169)
Effect of foreign exchange on cash	(221,763)	258,762
Increase (decrease) in cash and cash equivalents	9,869,529	(17,944,521)
Cash and cash equivalents, beginning of the period	2,244,466	22,466,493
Cash and cash equivalents, end of the period	$12,113,995	$4,521,972

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

INTERNATIONAL TOWER HILL MINES LTD.

NOTES TO THE CONDENSED CONSOLIDATED INTERIM FINANCIAL STATEMENTS

Six Months Ended June 30, 2018 and 2017

(Expressed in US dollars – Unaudited)

1. GENERAL INFORMATION AND NATURE OF OPERATIONS

International Tower Hill Mines Ltd. (“ITH” or the "Company") is incorporated under the laws of British Columbia, Canada. The Company’s head office address is 2300-1177 West Hastings Street, Vancouver, British Columbia, Canada.

International Tower Hill Mines Ltd. consists of ITH and its wholly owned subsidiaries Tower Hill Mines, Inc. (“TH Alaska”) (an Alaska corporation), Tower Hill Mines (US) LLC (“TH US”) (a Colorado limited liability company), Livengood Placers, Inc. (“LPI”) (a Nevada corporation), and 813034 Alberta Ltd. (an Alberta corporation). The Company is in the business of acquiring, exploring and evaluating mineral properties, and either joint venturing or developing these properties further or disposing of them when the evaluation is completed. At June 30, 2018, the Company controls a 100% interest in its Livengood Gold Project, an exploration-stage project in Alaska, U.S.A.

These unaudited condensed consolidated interim financial statements have been prepared on a going-concern basis, which presumes the realization of assets and discharge of liabilities in the normal course of business for the foreseeable future.

As at June 30, 2018, the Company had cash and cash equivalents of $12,113,995 compared to $2,244,466 at December 31, 2017. The Company has no revenue generating operations from which it can internally generate funds. On March 13, 2018, the Company completed a non-brokered private placement pursuant to which it issued 24,000,000 common shares at $0.50 per share for gross proceeds of $12,000,000.

The Company will require significant additional financing to continue its operations (including general and administrative expenses) in connection with advancing activities at the Livengood Gold Project and the development of any mine that may be determined to be built at the Livengood Gold Project, and there is no assurance that the Company will be able to obtain the additional financing required on acceptable terms, if at all. In addition, any significant delays in the issuance of required permits for the ongoing work at the Livengood Gold Project, or unexpected results in connection with the ongoing work, could result in the Company being required to raise additional funds to advance permitting efforts. The Company’s review of its financing options includes pursuing a future strategic alliance to assist in further development, permitting and future construction costs, although there can be no assurance that any such strategic alliance will, in fact, be realized.

Despite the Company's success to date in raising significant equity financing to fund its operations, there is significant uncertainty that the Company will be able to secure any additional financing in the current or future equity markets. The amount of funds to be raised and the terms of any proposed equity financing that may be undertaken will be negotiated by management as opportunities to raise funds arise. Specific plans related to the use of proceeds will be devised once financing has been completed and management knows what funds will be available for these purposes.

2. BASIS OF PRESENTATION

These unaudited condensed consolidated interim financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("U.S. GAAP") for interim financial information and with the instructions to Form 10-Q and Article 8 of Regulation S-X under the Securities Exchange Act of 1934, as amended. Accordingly, they do not include all of the information and footnotes required by U.S. GAAP for annual financial statements. These unaudited condensed consolidated interim financial statements should be read in conjunction with the audited consolidated financial statements for the year ended December 31, 2017 as filed in our Annual Report on Form 10-K. In the opinion of the Company's management, these financial statements reflect all adjustments, consisting of normal recurring adjustments, necessary to present fairly the Company's financial position at June 30, 2018 and the results of its operations for the six months then ended. Operating results for the six months ended June 30, 2018 are not necessarily indicative of the results that may be expected for the year ending December 31, 2018. The 2017 year-end balance sheet data was derived from audited financial statements but does not include all disclosures required by U.S. GAAP.

INTERNATIONAL TOWER HILL MINES LTD.

NOTES TO THE CONDENSED CONSOLIDATED INTERIM FINANCIAL STATEMENTS

Six Months Ended June 30, 2018 and 2017

(Expressed in US dollars – Unaudited)

The preparation of financial statements in conformity with U.S. GAAP requires management to make judgments, estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the period. These judgments, estimates and assumptions are continuously evaluated and are based on management's experience and knowledge of the relevant facts and circumstances. While management believes the estimates to be reasonable, actual results could differ from those estimates and could impact future results of operations and cash flows.

On August 9, 2018, the Board of Directors of the Company (the "Board") approved these condensed consolidated interim financial statements.

Basis of consolidation

These condensed consolidated interim financial statements include the accounts of ITH and its wholly owned subsidiaries TH Alaska, TH US, LPI and 813034 Alberta Ltd. All intercompany transactions and balances have been eliminated.

3. FAIR VALUE OF FINANCIAL INSTRUMENTS

The carrying values of cash and cash equivalents, accounts receivable and accounts payable and accrued liabilities approximate their fair values due to the short-term maturity of these financial instruments.

Financial instruments measured at fair value are classified into one of three levels in the fair value hierarchy according to the significance of the inputs used in making the measurement. The three levels of the fair value hierarchy are as follows:

- Level 1 – Unadjusted quoted prices in active markets for identical assets or liabilities;
- Level 2 – Inputs other than quoted prices that are observable for the asset or liability either directly or indirectly; and
- Level 3 – Inputs that are not based on observable market data.

	Fair value as at June 30, 2018 Level 1
Financial assets:	
Marketable securities	$13,327
Total	$13,327

	Fair value as at December 31, 2017 Level 1
Financial assets:	
Marketable securities	$ 15,543
Total	$ 15,543

4. CAPITALIZED ACQUISITION COSTS

The Company had the following activity related to capitalized acquisition costs:

Capitalized acquisition costs	Amount
Balance, December 31, 2017	$55,204,041
Acquisition costs	-
Balance, June 30, 2018	$55,204,041

INTERNATIONAL TOWER HILL MINES LTD.

NOTES TO THE CONDENSED CONSOLIDATED INTERIM FINANCIAL STATEMENTS

Six Months Ended June 30, 2018 and 2017

(Expressed in US dollars – Unaudited)

The following table presents costs incurred for exploration and evaluation activities for the six months ended June 30, 2018 and 2017:

	June 30, 2018	June 30, 2017
Exploration costs:		
Aircraft services	$4,200	$4,050
Assay	-	412,811
Environmental	107,014	106,905
Equipment rental	16,805	23,875
Field costs	63,084	68,128
Geological/geophysical	270,463	307,023
Land maintenance & tenure	421,005	415,305
Legal	26,511	37,272
Transportation and travel	1,245	4,136
Total expenditures for the period	$910,327	$1,379,505

Livengood Gold Project Property

The Livengood property is located in the Tintina gold belt approximately 113 kilometers (70 miles) northwest of Fairbanks, Alaska. The property consists of land leased from the Alaska Mental Health Trust, a number of smaller private mineral leases, Alaska state mining claims purchased or located by the Company and patented ground held by the Company.

Details of the leases are as follows:

a) a lease of the Alaska Mental Health Trust mineral rights having a term beginning July 1, 2004 and extending 19 years until June 30, 2023, subject to further extensions beyond June 30, 2023 by either commercial production or payment of an advance minimum royalty equal to 125% of the amount paid in year 19 and diligent pursuit of development. The lease requires minimum work expenditures and advance minimum royalties (all of which minimum royalties are recoverable from production royalties) which escalate annually with inflation. A net smelter return (“NSR”) production royalty of between 2.5% and 5.0% (depending upon the price of gold) is payable to the lessor with respect to the lands subject to this lease. In addition, an NSR production royalty of 1% is payable to the

lessor with respect to the unpatented federal mining claims subject to the lease described in b) below and an NSR production royalty of between 0.5% and 1.0% (depending upon the price of gold) is payable to the lessor with respect to the lands acquired by the Company as a result of the purchase of Livengood Placers, Inc. in December 2011. During the six months ended June 30, 2018 and from the inception of this lease, the Company has paid $330,433 and $2,962,821, respectively.

b) a lease of federal unpatented lode mining claims having an initial term of ten years commencing on April 21, 2003 and continuing for so long thereafter as advance minimum royalties are paid and mining related activities, including exploration, continue on the property or on adjacent properties controlled by the Company. The lease requires an advance minimum royalty of $50,000 on or before each anniversary date (all of which minimum royalties are recoverable from production royalties). An NSR production royalty of between 2% and 3% (depending on the price of gold) is payable to the lessors. The Company may purchase 1% of the royalty for $1,000,000. During the six months ended June 30, 2018 and from the inception of this lease, the Company has paid $50,000 and $730,000, respectively.

c) a lease of patented lode mining claims having an initial term of ten years commencing January 18, 2007, and continuing for so long thereafter as advance minimum royalties are paid. The lease requires an advance minimum royalty of $20,000 on or before each anniversary date through January 18, 2017 and $25,000 on or before each subsequent anniversary (all of which minimum royalties are recoverable from production royalties). An NSR production royalty of 3% is payable to the lessors. The Company may purchase all interests of the lessors in the leased property (including the production royalty) for $1,000,000 (less all minimum and production royalties paid to the date of purchase), of which $500,000 is payable in cash over four years following the closing of the purchase and the balance of $500,000 is payable by way of the 3% NSR production royalty. During the six months ended June 30, 2018 and from the inception of this lease, the Company has paid $25,000 and $210,000, respectively.

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d) a lease of unpatented federal lode mining and federal unpatented placer claims having an initial term of ten years commencing on March 28, 2007, and continuing for so long thereafter as advance minimum royalties are paid and mining related activities, including exploration, continue on the property or on adjacent properties controlled by the Company. The lease requires an advance minimum royalty of $15,000 on or before each anniversary date (all of which minimum royalties are recoverable from production royalties). The Company is required to pay the lessor the sum of $250,000 upon making a positive production decision, payable $125,000 within 120 days of the decision and $125,000 within a year of the decision (all of which are recoverable from production royalties). An NSR production royalty of 2% is payable to the lessor. The Company may purchase all of the interest of the lessor in the leased property (including the production royalty) for $1,000,000. During the six months ended June 30, 2018 and from the inception of this lease, the Company has paid $15,000 and $143,000, respectively.

Title to mineral properties

The acquisition of title to mineral properties is a detailed and time-consuming process. The Company has taken steps to verify title to mineral properties in which it has an interest. Although the Company has taken every reasonable precaution to ensure that legal title to its properties is properly recorded in the name of the Company, there can be no assurance that such title will ultimately be secured.

5. ACCRUED LIABILITIES

The following table presents the accrued liabilities balances at June 30, 2018 and December 31, 2017.

	June 30, 2018	December 31, 2017
Accrued liabilities	$303,633	$201,673
Accrued salaries and benefits	56,841	144,896
Total accrued liabilities	$360,474	$346,569

Accrued liabilities at June 30, 2018 include accruals for general corporate costs and project costs of $34,071 and $269,562, respectively. Accrued liabilities at December 31, 2017 include accruals for general corporate costs and project costs of $34,941 and $166,732, respectively.

6. DERIVATIVE LIABILITY

During 2011, the Company acquired certain mining claims and related rights in the vicinity of the Livengood Gold Project located near Fairbanks, Alaska. The aggregate consideration for the claims and rights was $13,500,000 in cash plus an additional payment based on the five-year average daily gold price ("Average Gold Price") from the date of the acquisition ("Additional Payment"). The Additional Payment equaled $23,148 for every dollar that the Average Gold Price exceeded $720 per troy ounce. If the Average Gold Price were less than $720, there would not have been any additional consideration due.

At initial recognition on December 13, 2011, the derivative liability was valued at $23,100,000. As at December 12, 2016, the five-year average daily gold price was $1,354.79, resulting in a derivative liability of $14,694,169. The obligation to make the contingent payment was secured by a Deed of Trust over the rights of the Company in the purchased claims in favor of the vendors. On January 12, 2017, the Company paid $14,694,169 for the timely and full satisfaction of the final derivative payment.

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7. SHARE CAPITAL

Authorized

500,000,000 common shares without par value. At December 31, 2017 and June 30, 2018, there were 162,392,996 and 186,816,683 shares issued and outstanding, respectively.

Share issuances

On March 13, 2018, the Company completed a non-brokered private placement pursuant to which it issued 24,000,000 common shares at $0.50 per share for gross proceeds of $12,000,000. Share issuance costs included $111,379 related to the private placement. Following the resignation of director Mark Hamilton on November 6, 2017, the Company recognized an obligation to issue 129,687 common shares, with a value of $63,593. On March 27, 2018, the Company issued the 129,687 common shares in full satisfaction of the obligation. The Company also issued 294,000 common shares pursuant to the exercise of stock options for total proceeds of $114,358 and transferred related contributed surplus of $65,036 to share capital during the six months ended June 30, 2018.

Stock options

The Company adopted an incentive stock option plan in 2006, as amended September 19, 2012 and reapproved by the Company's shareholders on May 28, 2015 and May 30, 2018 (the "2006 Plan"). The essential elements of the 2006 Plan provide that the aggregate number of common shares of the Company's capital stock that may be issued pursuant to options granted under the 2006 Plan may not exceed 10% of the number of issued shares of the Company at the time of the granting of the options. Options granted under the 2006 Plan will have a maximum term of ten years. The exercise price of options granted under the 2006 Plan shall be fixed in compliance with the applicable provisions of the TSX Company Manual in force at the time of grant and, in any event, shall not be less than the closing price of the Company's common shares on the TSX on the trading day immediately preceding the day on which the option is granted, or such other price as may be agreed to by the Company and accepted by the TSX. Options granted under the 2006 Plan vest immediately, unless otherwise determined by the directors at the date of grant.

On March 21, 2018, the Company granted incentive stock options to certain officers, employees and consultants of the Company to purchase a total of 420,085 common shares in the capital stock of the Company. The options vest 100% on the grant date with an expiry date of March 21, 2024. The exercise price of these options is C$0.61 per common share.

A summary of the status of the 2006 Plan as of June 30, 2018 and December 31, 2017 and changes is presented below:

	Six Months Ended June 30, 2018							Year Ended December 31, 2017	
	Number of Options		Weighted Average Exercise Price (C$)				Aggregate Intrinsic Value (C$)	Number of Options	
82	2/14/07	483,102,474	476,2						
83	2/22/07	484,594,374	477,771,245	10,427,332	2.18%	$0.0162	$0.0172	$0.0154	($3,200)	$157,381
84	3/1/07	503,971,706	497,148,577	1,615,000	0.32%	$0.0170	$0.0140	$0.0137	($ 485)	$21,641
85	3/8/07	506,573,672	499,750,543	6,495,607	1.30%	$0.0165	$0.0158	$0.0139	($2,012)	$88,277
86	3/15/07	524,537,306	517,714,177	2,004,764	0.39%	$0.0155	$0.0158	$0.0150	($ 603)	$29,468
87	3/29/07	536,911,464	530,088,335	1,020,000	0.19%	$0.0100	$0.0099	$0.0095		$ 9,690
88	4/5/07	537,933,964	531,110,835	7,583,622	1.43%	$0.0101	$0.0101	$0.0089	($1,350)	$66,144

(continued)

(continued)

Put #	Date	# of shares outstanding prior to put (a)	# of shares outstanding prior to put and not held by selling shareholders or affiliates (a)	# of shares issued for put transaction (a)	% of total issued	Market price per share on day prior to the transaction (a)	Current market price per share (a)	Dutchess price (a)	Athena fees 4%	Proceeds to DNA-Print
89	4/13/07	544,537,586	537,714,457	3,744,000	0.70%	$0.0080	$0.0073	$0.0074	($ 554)	$27,152
90	4/20/07	548,281,586	541,458,457	1,095,000	0.20%	$0.0083	$0.0082	$0.0077		$ 8,432
91	4/27/07	549,376,586	542,553,457	3,406,292	0.63%	$0.0079	$0.0077	$0.0074	($ 504)	$24,703
92	5/4/07	552,782,878	545,959,749	1,689,500	0.31%	$0.0075	$0.0076	$0.0072	($ 243)	$12,164
93	5/11/07	554,472,378	547,649,249	1,910,000	0.35%	$0.0073	$0.0072	$0.0069		$13,179
94	5/16/07	556,382,378	549,559,249	2,637,529	0.48%	$0.0670	$0.0680	$0.0061		$16,089
	10/21/05	49,947,895	143,124,766	1,250,000	0.87%	$0.0140	$0.0146	$0.0000		$ 0
	12/15/05	226,498,155	219,675,026	2,500,000	1.14%	$0.0220	$0.0205	$0.0000		$ 0
				338,816,654					($20,852)	$5,594,789

(a) On July 11, 2005, we had a twenty-for-one reverse stock split. The share price and the number of shares outstanding have been adjusted to reflect this twenty-for-one reverse stock split.

For each put transaction, Dutchess receives shares. No fees are paid to Dutchess for the puts. DNAPrint received the amounts in the column Proceeds to DNAPrint for the shares issued to Dutchess.

RISK FACTORS

Before deciding to invest in us or to maintain or increase your investment, you should carefully consider the risks described below, in addition to other available information. Each of the following risks could harm our business, financial condition and results of operations. These risks could cause the trading price of our common stock to decline and you could lose all or part of your investment.

RISKS RELATED TO OUR FINANCIAL CONDITION AND BUSINESS

IT IS A STRONG POSSIBILITY THAT OUR SHARE PRICE WILL DECREASE AS SHARES ARE ISSUED TO DUTCHESS.

During 2006, we issued 188,860,259 shares of our common stock to Dutchess. Dutchess does not currently own any of these shares. We are registering 125,000,000 shares that we may issue pursuant to the equity line; however depending on our stock price, this may not be enough shares to access the full $10 million equity line which will require us to file another registration statement that would need to be declared effective by the Securities and Exchange Commission. On April 5, 2007, the closing price of our common stock was $0.01. Assuming we issue puts only at $0.01, we would need to register an additional 875,000,000 shares of our common stock to access the full equity line pursuant to the Investment Agreement. We also have several convertible debentures with Dutchess that allows them to convert a total of $2.1 million of convertible debentures into 229,998,656 shares of our common stock at March 31, 2007. If our stock price decreases, then our existing stockholders would experience greater dilution. As a result, this may make it difficult or impossible for you to sell our common stock.

DUTCHESS HAS A SECURITY INTEREST IN SUBSTANTIALLY ALL OF OUR ASSETS AND WE ARE CURRENTLY IN DEFAULT OF THE DUTCHESS NOTES THAT ARE OUTSTANDING.

We are currently in default of all of our Dutchess notes which total $5,345,963 at March 31, 2007. Dutchess has a security interest in substantially all of our assets. Since we are in default of the notes and cannot currently pay them as scheduled, Dutchess could get substantially all of our assets to service their debt outstanding.

WE WILL USE A SUBSTANTIAL PART OF THE PROCEEDS FROM THE SHARES WE ARE REGISTERING FOR DUTCHESS TO SERVICE THE OUTSTANDING DEBT WITH DUTCHESS.

We are required to use a substantial part of the proceeds from the shares we are registering for Dutchess to service the outstanding debt with Dutchess. As a result, these proceeds will not be available for operating capital or to grow our business and we will need to get operating capital from other sources.

IT IS A STRONG POSSIBILITY THAT OUR SHARE PRICE WILL DECREASE AS SHARES ARE ISSUED TO LA JOLLA COVE, INC.

During 2006, we issued 10,182,249 shares of our common stock to La Jolla. La Jolla does not currently own any of these shares. At March 31, 2007, La Jolla has the right to convert the remaining $201,250 of their convertible debenture into common stock and exercise the related 3,018,755 warrants at a $1 exercise price. We have the right to reject a conversion if the stock price is below $0.50 per share. If we exercise this right, we then are obligated to pay the portion of the debenture the conversion notice was for, plus applicable unpaid accrued interest and a premium equal to 10% of those amounts. We may need to accept these conversions to help fund our operations. As a result of these conversions our stock price could decrease. .If our stock price decreases, then our existing stockholders would experience greater dilution. As a result, this may make it difficult or impossible for you to sell our common stock.

REGULATORY OVERSIGHT OF OUR PRODUCTS AND SERVICES MAY INCREASE OUR COSTS TO MARKET OUR PRODUCTS AND SERVICES AND ADVERSELY AFFECT OUR ABILITY TO MARKET OUR PRODUCTS AND SERVICES.

Currently, there is limited Food and Drug Administration, or FDA, regulation of genetic tests. Within the field of personalized health and medicine, governmental and other entities may enact patient privacy and healthcare laws and regulations that may limit the generation and use of genomic variation data. "Genomic variation data" is the information obtained when scientists search the gene for differences across the entire human genome for changes and variations. To the extent that FDA laws and regulations limit the use of our products and services or impose additional costs on our customers, we may be unable to market effectively our products and services, and we may not generate sufficient revenue to sustain our operations. Furthermore, we may be directly subject to regulations as a provider of diagnostic information. A diagnosis is the evaluation of a patient or a sample to determine what the status of the patient might be. The information that results from this evaluation is called "diagnostic information" and would include such information as height, weight, sex, age, blood pressure, sugar levels and many other pieces of data. The Secretary's Advisory Committee on Genetic Testing, an advisory panel to the Secretary of the U.S. Department of Health and Human Services, has recommended that the FDA expand its regulation of genetic testing to require FDA

approval for all new genetic tests and labeling of genetic tests. If the FDA adopts this recommendation, it may require us, or our customers, to apply for FDA approval as a prerequisite to marketing genetic tests that incorporate our intellectual property. If the FDA were to deny any application of this kind, it could adversely affect our business, and we may be unable to generate sufficient revenue to sustain our operations.

To the extent that government regulations restrict the sale of our products and services or impose other costs, we may be unable to provide our products and services to our customers on terms sufficient to recover our expenses.

OUR SUCCESS WILL DEPEND, IN PART, ON HOW RAPIDLY THE PHARMACEUTICAL AND BIOTECHNOLOGY INDUSTRY IMPLEMENTS GUIDANCE FROM THE U.S. DEPARTMENT OF HEALTH AND THE FDA REGARDING A POTENTIAL EXPANSION OF REGULATION OF OUR INDUSTRY. WITHOUT THIS IMPLEMENTATION BY THE PHARMACEUTICAL AND BIOTECHNOLOGY INDUSTRY, WE MAY BE UNABLE TO MARKET EFFECTIVELY OUR TESTS AND SERVICES, AND WE MAY NOT GENERATE SUFFICIENT REVENUE TO SUSTAIN OUR OPERATIONS.

On November 3, 2003, the FDA issued draft guidance which is currently not mandatory but may eventually become mandatory that encouraged drug and biologic developers to conduct pharmacogenomic tests during drug development and clarified how the FDA will evaluate the resulting data. "Pharmacogenomic tests" are clinical laboratory tests of all kinds to determine whether a drug is working or not working on a patient that is experiencing a particular illness or expressing a disease. It has only been recently that genetic scientists have been able to link genetic testing to the performance of a drug. The term is often used within the pharmaceutical industry to describe the testing of individuals for their genetic influences on the effectiveness of a drug, or more precisely, whether there is something in a person's genes that would either enhance or prevent the treatment of that individual's disease with a particular drug.

The FDA guidance provides specific criteria and recommendations on the submission of pharmacogenomic data in connection with Investigational New Drug Applications, New Drug Applications and Biological License Applications. Before any company or individual can treat a single human patient with a new chemical entity, often referred to as a NCE, or a new biological entity, referred to as a NBE, scientists must first prove that the potential drug is safe within existing treatment regimes. For example, new chemical entities used to treat cancer might be allowed to be much more toxic to other cells in the body than would a treatment for other less lethal diseases. Scientists file for permission to the FDA to treat human patients and package all the information into an application with the FDA called the `Investigational New Drug Application' or IND. The draft FDA guidance includes information on the type of data needed and how the FDA will or will not use such data in regulatory decisions. The FDA asked for voluntary submissions of research information in order to gain experience as the field of pharmacogenomics evolves. In addition, the FDA held a workshop in November 2003 to discuss its draft guidance and stated that the agency plans in the near future to issue final guidance on the co-development of a pharmacogenomic test and drug. Our success will depend, in part, on how rapidly the pharmaceutical and biotechnology industry implements the guidance and, accordingly, the validity of our test and services as a basis for identifying genomic variation and for correlating drug response with genomic variation. Without this implementation by the pharmaceutical and biotechnology industry, we may be unable to market effectively any of our pharmacogenomics tests we may have as well as any of our pharmacogenomics services, and we may not generate sufficient revenue to sustain our operations.

PUBLIC OPINION ON ETHICAL ISSUES RELATED TO THE CONFIDENTIALITY AND APPROPRIATE USE OF GENETIC TESTING COULD REDUCE THE POTENTIAL MARKETS FOR OUR PRODUCTS AND SERVICES, WHICH COULD PREVENT US FROM GENERATING SUFFICIENT REVENUE TO SUSTAIN OUR OPERATIONS.

Public opinion on ethical issues related to the confidentiality and appropriate use of genetic testing results may influence governmental authorities to call for limits on, or regulation of the use of, genetic testing. In addition, governmental authorities or other entities may call for limits on, or regulation of the use of genetic testing or prohibit testing for genetic predisposition to certain conditions, particularly for those that have no known cure. The occurrence of any of these events could reduce the potential markets for our products and services, which could prevent us from generating sufficient revenue to sustain our operations.

For example, the FDA has approved a medication for use in African Americans called BilDil that was developed by a pharmaceutical company called NitroMed. Recently, articles have appeared accusing the FDA and NitroMed of `racial discrimination' and claiming that no drugs should be developed using genetic testing that might separate out individuals by `race, color or creed' without regard to the benefit which might be caused for the African American

patient. According to such critics, the potential harm in the form of increased discrimination far outweighs the benefits. Several noteworthy genetic scientists have also voiced their opinions that our technology and technologies similar to those developed by NitroMed and others are discriminating and should not be developed or approved by the Federal, State or local governments.

IF WE DO NOT SUCCESSFULLY DISTINGUISH AND COMMERCIALIZE OUR PRODUCTS AND SERVICES, WE WILL NOT ATTRACT A SUFFICIENT NUMBER OF CUSTOMERS. ACCORDINGLY, WE MAY BE UNABLE TO COMPETE SUCCESSFULLY WITH OUR COMPETITORS OR GENERATE REVENUE SIGNIFICANT ENOUGH TO SUSTAIN OUR OPERATIONS.

Numerous entities are attempting to identify genomic variation predictive of specific diseases and drug response and to develop products and services based on these discoveries. We face competition in these areas from pharmaceutical, biotechnology and diagnostic companies, academic and research institutions and government and other publicly-funded agencies, both in the United States and abroad, most of which have substantially greater capital resources, research and development staffs, facilities, manufacturing and marketing experience, distribution channels and human resources than do we. Also, large pharmaceutical companies have their own internal research and development efforts that could surpass or eliminate our technology from the market. One of our key competitors is PPGx, Inc., a leading international developer and supplier of research-based pharmacogenomics services and products which launched its GeneTrials™ Bioinformatics Platform.

Our competitors may discover, characterize or develop important technologies applying genomics that are more effective than those technologies which we develop. Additionally, these competitors may obtain regulatory approvals for their drugs and diagnostics more rapidly than we do, which could limit our ability to market effectively our products and services. If our patent applications are not awarded or if our competitors in the field of genetic research develop and receive approval of patents that supersede our applications, we could be forced to cease the development of our products, services and technologies.

Some companies and governments are marketing or developing a number of databases and informatics tools to assist participants in the healthcare industry and academic researchers in the management and analysis of genomic data. "Informatics tools" is a term used by scientists to describe software, computer programs or mathematical programs that analyze data sets or collected information that is stored in data files. Such computer programs can take an apparently meaningless block of numbers that are recorded from a laboratory experiment and evaluate trends, look for statistical relationships and group or segregate the numbers according to their levels of importance to the scientist. We believe our competitors have developed or plan to develop databases containing gene sequence, genomic variation or other genomic information and are marketing or plan to market their data to pharmaceutical and biotechnology companies or plan to make freely available their databases.

WE ALSO FACE SERIOUS COMPETITION FROM COMPETITORS IN THE FORENSIC DNA TESTING MARKET, CONSUMER DNA PRODUCTS MARKET AND THE GENOTYPING MARKET AND IF WE ARE UNABLE TO COMPETE IN THESE MARKETS, WE WILL NOT GENERATE REVENUES SIGNIFICANT ENOUGH TO SUSTAIN OUR OPERATIONS.

There are several competitors in our consumer, forensic and genotyping markets who are larger companies and have more operating capital to promote their products. If we are unable to compete in these markets, we will not generate revenues significant enough to sustain our operations.

DEMAND FOR OUR CONSUMER PRODUCTS COULD DECREASE DUE TO REDUCED DEMAND FROM CONSUMERS.

We remain skeptical that the consumer market for our products, which is mainly supported by genealogy enthusiasts, will remain strong enough to justify significant expenditures to develop new products. It is possible that the application of genetic testing to genealogy is a passing fad and that public interest in genetic genealogy testing will substantially decrease. If public interest decreases, our revenues generated from our products sold to the consumer market will likely decrease.

ALTHOUGH MANY OF OUR COMPETITORS USE SIMILAR TECHNOLOGIES, THEIR APPROACH TO DATA ANALYSIS MIGHT BE COMPLETELY DIFFERENT AND MORE EFFICIENT THAN OURS. THIS MAY CAUSE CONSUMERS TO CHOOSE OUR COMPETITOR'S PRODUCTS AND SERVICES OVER OURS AND FORCE US TO CHANGE OUR PRODUCTS AND SERVICES TO THE MORE EFFICIENT FORM OF DATA ANALYSIS OF OUR COMPETITORS.

We evaluate the mixture of genetic inheritance within individuals and relate that information to biological information. Another approach to finding similar information is to evaluate large groups of individuals in `pools' of DNA and look for differences or similarities amongst the data. Our approach may prove to be too cumbersome for the industry to adopt, and the industry may not want to accept it because it is `too personal', meaning that overall `generic' descriptors might be more immediately valuable to the industry than knowing whether or not a single individual will respond favorably to a medication treatment. The `pooled' approach is more often the approach that many pharmaceutical companies and our competitors practice. Additionally, our technology depends upon looking at individuals within a population pool and therefore projecting the results of many individual samples upon a general population that may not be clearly identified. Our competitors rely upon self-reporting descriptors such as `African American', `Caucasian' or `Hispanic' to pool their DNA samples. We do not presuppose the reported identity of an individual but rather look at their inherited genetic markers that tell us what group to associate them with. This approach may not be accepted by the industry, and a pooled method, although not as accurate, may become the standard. This would significantly impact our ability to promote, sell, license or further develop our products, services or technologies within any of our current markets.

WE HAVE HAD LOSSES SINCE OUR INCEPTION WHICH MAY NEGATIVELY IMPACT OUR ABILITY TO ACHIEVE OUR BUSINESS OBJECTIVES. WE MAY NEVER BE ABLE TO REDUCE THESE LOSSES, WHICH WILL REQUIRE US TO SEEK ADDITIONAL DEBT OR EQUITY FINANCING THAT MAY NOT BE AVAILABLE TO US.

We incorporated under the laws of the State of Utah on January 3, 1983 as Lexington Energy, Inc. We have incurred losses and experienced negative operating cash flow since our formation. For the year ended December 31, 2006, we had a net loss of $12,348,364. At December 31, 2006, we had an accumulated deficit of $38,102,527 and a working capital deficit of $4,991,305. We expect to continue to incur significant expenses. Our operating expenses have been and are expected to continue to outpace revenues and result in significant losses in the near term. We may never be able to reduce these losses, which will require us to seek additional debt or equity financing. If such financing is available, you may experience significant dilution.

WE CONTINUE TO BE A DEVELOPMENTAL STAGE ENTERPRISE COMPANY AND WE DO NOT KNOW WHEN OUR PHARMACOGENOMICS PRODUCTS WILL FINISH THEIR DEVELOPMENT.

We continue to devote substantially all of our efforts to establishing our business products, and our principal operations have not commenced yet. We are still in the research and development phase of our pharmacogenomics product and services. The development phase can take three to seven years or more to develop a product or service as well as the potential costs to develop a project prior to bringing it to the market takes a significant investment by us. It will be a few years prior to any of our pharmacogenomics products or services being developed. Our pharmacogenomics projects may never materialize into a commercialized product.

OUR INDEPENDENT AUDITORS HAVE EXPRESSED DOUBT ABOUT OUR ABILITY TO CONTINUE AS A GOING CONCERN, WHICH MAY HINDER OUR ABILITY TO OBTAIN FUTURE FINANCING.

In their report dated March 8, 2007, our independent registered public accounting firm has expressed doubt about our ability to continue as a going concern in our financial statements for the years ended December 31, 2006 and 2005. The auditors raised concerns about our ability to continue as a going concern as a result of recurring losses from operations, a working capital deficit, and our need for a significant amount of capital financing to proceed with our business plan. Our ability to continue as a going concern is subject to our ability to generate a profit and/or obtain necessary funding from outside sources, including obtaining additional funding from the sale of our securities, increasing sales or obtaining loans and grants from various financial institutions where possible.

WE NEED IMMEDIATE FUNDS AND MAY NOT BE ABLE TO OBTAIN ANY ADDITIONAL FINANCING IN THE AMOUNTS OR AT THE TIMES THAT WE MAY REQUIRE THE FINANCING. ADDITIONALLY IF WE OBTAIN FINANCING, IT MAY NOT BE ON ACCEPTABLE TERMS. WE WILL HAVE TO CURTAIL OUR BUSINESS IF WE CANNOT FIND ADEQUATE FUNDING.

We may need immediate funds and may not be able to obtain any additional financing in the amounts or at the times that we may require the financing or, if we do obtain any financing, that it would be on acceptable terms because of the following:

- we have limited assets to pledge as security for the loan;
- we are in poor financial condition; and
- we may be viewed as a high market risk.

We have a convertible debenture with non-detachable warrants with La Jolla Cove Investors, Inc. (La Jolla). At March 31, 2007, we had $201,250 principal outstanding and $283 accrued interest. The number of common stock shares into which this debenture may be converted is equal to the dollar amount of the debenture being converted multiplied by sixteen, minus the product of the conversion price multiplied by fifteen times the dollar amount of the debenture being converted, and the entire foregoing result shall be divided by the conversion price. The conversion price is equal to the lesser of (i) $0.20 or (ii) 80% of the average of the five lowest daily value weighted average price of our common stock during the twenty trading days prior to La Jolla s election to convert. We have the right to reject a conversion if the stock price is below $0.50 per share. If we exercise this right, we then are obligated to pay the portion of the debenture the conversion notice was for plus applicable unpaid accrued interest and a premium equal to 10% of those amounts. At March 31, 2007, the convertible debt converts into 4,359,777 shares of our common stock assuming a $0.50 per share price. If La Jolla converted their debt at May 31, 2007 and we didn t invoke the floor of $0.50 per share, they would receive 582,435,818 shares. The non-detachable warrants must be exercised concurrently with the conversion of debt to common stock by La Jolla. La Jolla has the right to exercise warrants equaling fifteen times the dollar amount of the debenture being converted at an exercise price of $1.00. At March 31, 2007, there were 3,018,750 warrants outstanding that could be converted into common stock. If La Jolla were to sell the stock we put to them, it will likely have a depressive effect on the market price of our common stock. This decrease in our market price may hinder our ability to obtain necessary funding from certain sources, including obtaining additional funding from the sale of our securities or obtaining loans and grants from various financial institutions where possible.

In addition, we have entered into an Investment Agreement with Dutchess. Dutchess has committed to purchase our common stock on a monthly basis up to an aggregate purchase price of $10 million over a five-year period, which expires March 30, 2012. The Dutchess Agreement requires us to put stock to Dutchess each time we raise funds. If Dutchess were to sell the stock we put to them, it will likely have a depressive effect on the market price of our common stock. This decrease in our market price may hinder our ability to obtain necessary funding from certain sources, including obtaining additional funding from the sale of our securities or obtaining loans and grants from various financial institutions where possible. During 2006, we executed 49 puts with Dutchess and issued 188,860,259 shares of our common stock, which Dutchess does not currently own.

The proceeds from the shares issued to Dutchess will mainly be used to service the Dutchess notes. We expect to receive 500,000 euros per month from April 2007 through September 2007 with the remaining 443,240 euros paid during October 2007 from the sale of an investment. Subsequent to October, we will need additional funding. Our failure to obtain sufficient additional financing could result in the delay or abandonment of some or all of our development, expansion and expenditures, which could harm our business and the value of our common stock.

WE MAY NOT HAVE ADEQUATE PATENT PROTECTION AND CONFIDENTIALITY AGREEMENTS FOR OUR PROPRIETARY TECHNOLOGY. IF WE DO NOT PROTECT OUR INTELLECTUAL PROPERTY RIGHTS, THERE IS A RISK THAT THEY WILL BE INFRINGED UPON OR THAT OUR TECHNOLOGY INFRINGES UPON ONE OF OUR COMPETITOR'S PATENTS. AS A RESULT, WE MAY EXPERIENCE A LOSS OF REVENUE AND OUR OPERATIONS MAY BE MATERIALLY HARMED.

To the extent possible, we anticipate filing patent applications for protection on future products that we develop. We currently have patents in the United States for:

- Efficient Methods and Apparatus for High-Throughput Processing of Gene Sequence Data (used with our consumer ancestry products),
- Methods for the Identification of Genetic Features for Complex Genetics Classifiers (used with our consumer ancestry products),
- Methods, Products and Treatments for Diabetes (used with our CD-59 project),
- Recombinant Human Erythropoietin with Altered Biological Activity (used with our PT-401 project),
- Modified Polypeptides with Increased Biological Activity (used with our PT-401 project),
- Integrated disease information system (computational modeling),
- Hierarchical Biological Modeling System (computational modeling) and
- Production and Use of Recombinant Protein Multimers with Increased Biological Activity (used with our PT-401 project).

It is possible that patents we apply for may not be issued and that any current or future patents will not afford us commercially significant protection of our products, or that we will not have adequate resources to enforce our patents. Inasmuch as we intend to sell our products in foreign markets, we also intend to seek foreign patent protection for our products and technologies. The patent laws of other countries may differ from those of the United States as to patentability of our products and technologies, and the degree of protection afforded. We are currently not aware of any infringement by a third party. Also, we are not aware of any instances of our products infringing on the patents of others; however, they may, and we may not have the financial or other resources necessary to successfully defend a claim of violation of proprietary rights. We currently have one employee who potentially had some confidential data regarding our consumer products on his computer when he left and we are trying to determine if he has used that

information improperly. We rely on confidentiality and nondisclosure arrangements with our employees and entities we do business with; however, these agreements may not provide us with meaningful protection.

IF WE ARE UNABLE TO RETAIN THE SERVICES OF MESSRS. RICHARD GABRIEL, TONY FRUDAKIS AND HECTOR GOMEZ, WE MAY NOT BE ABLE TO CONTINUE OPERATIONS.

Our success depends to a significant extent upon the continued service of Mr. Richard Gabriel, our President and Chief Executive Officer, Dr. Tony Frudakis, our Founder and Chief Scientific Officer, and Dr. Hector Gomez, our Chairman of the Board and Chief Medical Officer. We currently have employment agreements with each individual. We do not maintain key-man insurance on the lives of Messrs. Gabriel, Frudakis, and Gomez. If Messrs. Gabriel, Frudakis, and Gomez were to resign, the loss could result in loss of sales, delays in new product development and diversion of management resources, and we could face high costs and substantial difficulty in hiring qualified successors and could experience a loss in productivity while any such successor obtains the necessary training and experience. In addition, in order to successfully implement and manage our business plan, we are dependent upon, among other things, successfully recruiting qualified personnel who are familiar with the specific issues facing the deciphering of complex genetic traits. In particular, we must hire and retain experienced management personnel to help us continue to grow and manage our business, and skilled genetic technicians to further our research and development efforts. Competition for qualified personnel is intense. If we do not succeed in attracting new personnel or in retaining and motivating our current personnel, our business could be harmed.

WE HAVE NOT PAID OUR DUTCHESS NOTE PRINCIPAL PAYMENTS IN ACCORDANCE WITH THE TERMS OF THE NOTES AND WE MAY INCUR PENALTIES AND FEES RELATED TO THESE LATE PAYMENTS.

We have issued to Dutchess Convertible Notes and Convertible Debentures. We have made payments on the Convertible Notes, however our payments have not been sufficient to meet all payment requirements for all of the Notes and we are in default. As a result, Dutchess has the right to convert the residual amount of the Notes to a convertible debenture which can convert into our common stock at the lesser of (i) 50% of the lowest closing bid price during the fifteen trading days immediately preceding the maturity date or (ii) 100% of the lowest bid price for the twenty trading days immediately preceding the conversion date. At March 31, 2007, the Dutchess March Note was not paid when due. It is also unlikely that we will be unable to pay our remaining Dutchess notes by their maturity dates and Dutchess has the right to switch the residual amount of on any unpaid notes to a three-year convertible debenture.

We are in default on $5,345,963 of Dutchess Notes payable at March 31, 2007 due to not making the minimum principal payments. Dutchess has the right to switch the residual amount of $1,080,963 on the Dutchess March 2006 Note to a three-year convertible debenture which would convert into 296,154,247 shares of common stock at March 31, 2007; however, they had not exercised this right at March 31, 2007 nor at the time this report was issued. The Dutchess documents purport to give Dutchess the right to charge us liquidated damages of up to 30% of the face amount of these notes. Dutchess has not exercised this right at March 31, 2007 nor at the time this report was issued. We have accrued $1.7 million at March 31, 2007 for any such penalties and fees.

RISKS RELATED TO OUR COMMON STOCK

"PENNY STOCK" RULES MAY MAKE BUYING AND SELLING OUR SECURITIES DIFFICULT.

Trading in our securities is subject to the Securities and Exchange Commission s penny stock rules and it is anticipated that trading in our securities will continue to be subject to the penny stock rules for the foreseeable future. The Securities and Exchange Commission has adopted regulations that generally define a penny stock to be any equity security that has a market price of less than $5.00 per share, subject to certain exceptions. These rules require that any broker-dealer who recommends our securities to persons other than prior customers and accredited investors must, prior to the sale, make a special written suitability determination for the purchaser and receive the purchaser s written agreement to execute the transaction. Unless an exception is available, the regulations require the delivery, prior to any transaction involving a penny stock, of a disclosure schedule explaining the penny stock market and the risks associated with trading in the penny stock market. In addition, broker-dealers must disclose commissions payable to both the broker-dealer and the registered representative and current quotations for the securities they offer. The additional burdens imposed upon broker-dealers by such requirements may discourage broker-dealers from recommending transactions in our securities, which could severely limit the liquidity of our securities and consequently adversely affect the market price for our securities.

WE MAY NOT BE ABLE TO REGISTER SUFFICIENT SHARES TO FULLY ACCESS THE EQUITY LINE WITH DUTCHESS AND MAY NEED TO SEEK ADDITIONAL CAPITAL TO MEET OUR WORKING CAPITAL NEEDS.

The equity line we entered into during March 2007 with Dutchess requires us to register shares to access this line. We may only issue a put to Dutchess if we have registered the shares of common stock. We are registering 125,000,000 shares that we may issue pursuant to the equity line; however depending on our stock price, this may not be enough shares to access the full $10 million equity line which will require us to register additional shares. On April 5, 2007, the closing price of our common stock was $0.01. Assuming we issue puts only at $0.01, we would be able to access approximately $1.25 million of our equity line pursuant to the Investment Agreement based upon the shares we are registering. Assuming a price of $0.01, we would be required to register an additional 875,000,000 to access the remaining equity line which would require us to file a subsequent registration statement with the Securities and Exchange Commission and that registration statement would need to be deemed effective prior to the issuance of any such additional shares.

If we can not raise sufficient funds pursuant to our Investment Agreement with Dutchess, for our capital requirements, we will need to seek additional funding which may not be available on terms acceptable to us or at all.

EXISTING STOCKHOLDERS MAY EXPERIENCE SIGNIFICANT DILUTION FROM THE SALE OF SECURITIES PURSUANT TO OUR INVESTMENT AGREEMENT WITH DUTCHESS.

The sale of shares pursuant to our Investment Agreement with Dutchess will have a dilutive impact on our stockholders. During 2006, we executed 49 puts with Dutchess and issued 188,860,259 shares of our common stock, which Dutchess does not currently own. Our closing stock price fluctuated from a high of $0.0304 in March 2006 to a low of $0.0068 in December 2006. On December 31, 2006, the closing price of our stock was $0.0091. As a result, our net income per share, if any, could decrease in future periods, and the market price of our common stock could decline. In addition, the lower our stock price at the time we exercise our put option, the more shares we will have to issue to Dutchess to draw down on the full equity line with Dutchess. If our stock price decreases, then our existing stockholders would experience greater dilution.

DUTCHESS WILL PAY LESS THAN THE THEN-PREVAILING MARKET PRICE OF OUR COMMON STOCK, WHICH MAY CAUSE OUR STOCK PRICE TO DECLINE.

The common stock to be issued under our agreement with Dutchess will be purchased at a 7% discount to the lowest closing bid price of our common stock during the five trading days after our notice to Dutchess of our election to exercise our put right. These discounted sales could cause the price of our common stock to decline, and you may not be able to sell our stock for more than you paid for it.

OUR STOCK PRICES HAVE BEEN VOLATILE AND THE FUTURE MARKET PRICE FOR OUR COMMON STOCK IS LIKELY TO CONTINUE TO BE VOLATILE. FURTHER, THE LIMITED MARKET FOR OUR SHARES WILL MAKE OUR PRICE MORE VOLATILE. THIS MAY MAKE IT DIFFICULT FOR YOU TO SELL OUR COMMON STOCK FOR A POSITIVE RETURN ON YOUR INVESTMENT.

The public market for our common stock has historically been very volatile. From May 2005 to April 2007, our high and low market prices were $0.138 (July 2005) and $0.0072 (December 2006), respectively. Any future market price for our shares is likely to continue to be very volatile. This price volatility may make it more difficult for you to sell shares when you want at prices you find attractive. We do not know of any one particular factor that has caused volatility in our stock price. However, the stock market in general has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of companies. Broad market factors and the investing public's negative perception of our business may reduce our stock price, regardless of our operating performance. Further, the market for our common stock is limited and a larger market may never develop or be maintained. Market fluctuations and volatility, as well as general economic, market and political conditions, could reduce our market price. As a result, this may make it difficult or impossible for you to sell our common stock.

USE OF PROCEEDS

This prospectus relates to shares of our common stock that may be offered and sold from time to time by Dutchess Private Equities Fund, Ltd. and certain selling stockholders. We will not receive any proceeds from the sale by the selling stockholders of our common stock. We will receive proceeds from our Investment Agreement with Dutchess Private Equities Fund. The purchase price of the shares purchased under the Investment Agreement will be equal to 93% of the lowest of the closing best bid prices of our common stock on the Over-The-Counter Bulletin Board for the five days immediately following the date of our notice of election to exercise our put.

For illustrative purposes, we have set forth below our intended use of proceeds for the range of net proceeds indicated below to be received under the Investment Agreement. The Gross Proceeds represent the total dollar amount that Dutchess is obligated to purchase. The table assumes estimated offering expenses of $25,000.

	Proceeds	Proceeds
	If 100% Sold	If 50% Sold
Gross proceeds	$1,250,000	$625,000
Estimated accounting, legal and associated expenses of offering	$ 25,000	$25,000
Net Proceeds	$1,225,000	$600,000

	Priority	Proceeds	Proceeds
Retirement of Debt	1st	$ 1,000,000	$600,000
Research and Development expenses on Pharmacogenomics projects	2nd	$ 225,000	-
		$1,225,000	$600,000

The proceeds will be used to retire a portion of the notes owed to Dutchess which have matured or are maturing through June 2007. There is no stated interest rate on the notes; however the notes have a discount to the face amount of 20% to 23%. The proceeds from the notes were used mainly to fund our pharmacogenomics research and development. Proceeds of the offering which are not immediately required for the purposes described above will be invested in United States government securities, short-term certificates of deposit, money market funds and other high-grade, short-term interest-bearing investments.

DETERMINATION OF OFFERING PRICE

The selling stockholder may sell shares from time to time in negotiated transactions, broker's transactions or a combination of such methods at market prices prevailing at the time of the sale or at negotiated prices.

SELLING SECURITY HOLDER

Based upon information available to us as of March 31, 2007, the following table sets forth the name of the selling stockholder, the number of shares owned, the number of shares registered by this prospectus and the number of outstanding shares that the selling stockholder will own after the sale of the registered shares, assuming all of the shares are sold. The information provided in the table and discussion below has been obtained from the selling stockholder. The selling stockholder may have sold, transferred or otherwise disposed of, or may sell, transfer or otherwise dispose of, at any time or from time to time since the date on which it provided the information regarding the shares beneficially owned, all or a portion of the shares of common stock beneficially owned in transactions exempt from the registration requirements of the Securities Act of 1933. As used in this prospectus, "selling stockholder" includes donees, pledgees, transferees or other successors-in-interest selling shares received from the named selling stockholder as a gift, pledge, distribution or other non-sale related transfer.

Beneficial ownership is determined in accordance with Rule 13d-3(d) promulgated by the Commission under the Securities Exchange Act of 1934. Unless otherwise noted, each person or group identified possesses sole voting and investment power with respect to the shares, subject to community property laws where applicable.

Selling Stockholder	Number of shares beneficially owned before offering	Number of Shares that may be offered pursuant to this prospectus	Number of Shares Beneficially Owned After Offering [1][3]	Percentage of Class Owned After Offering
Dutchess Private Equities Fund, Ltd [2]				
50 Commonwealth Ave.	0	125,000,000	0	*
Boston, MA 02116				

*less than 1%

(1) Assumes all shares are sold pursuant to this Prospectus.

(2) Douglas Leighton and Michael Novielli share voting and dispositive powers over the shares owned by Dutchess Private Equities Fund, Ltd. Mr. Leighton and Mr. Novielli disclaim beneficial ownership of these securities. The 125,000,000 shares are to be issued upon the closing of a Put under the terms of the Investment Agreement with Dutchess. Dutchess Private Equities Fund, Ltd is an underwriter within the meaning of the Securities Act.

(3) Excludes outstanding convertible debentures held by Dutchess. See Our Capital Structure and Shares Eligible for Future Sale for a discussion of these potential shares.

PLAN OF DISTRIBUTION

The selling stockholder will act independently of us in making decisions with respect to the timing, manner and size of each sale. The selling stockholder may sell the shares from time to time:

- in transactions on the Over-the-Counter Bulletin Board or on any national securities exchange or U.S. inter-dealer system of a registered national securities association on which our common stock may be listed or quoted at the time of sale; or

- in private transactions and transactions otherwise than on these exchanges or systems or in the over-the-counter market; or at prices related to such prevailing market prices, or

- in negotiated transactions, or

- in a combination of such methods of sale; or

- any other method permitted by law.

The selling stockholder may effect such transactions by offering and selling the shares directly to or through securities broker-dealers, and such broker-dealers may receive compensation in the form of discounts, concessions or commissions from the selling stockholder and/or the purchasers of the shares for whom such broker-dealers may act

as agent or to whom the selling stockholder may sell as principal, or both, which compensation as to a particular broker-dealer might be in excess of customary commissions. Dutchess, and any broker-dealers who act in connection with the sale of its shares are "underwriters" within the meaning of the Securities Act, and any discounts, concessions or commissions received by them and profit on any resale of the shares as principal may be deemed to be underwriting discounts, concessions and commissions under the Securities Act.

On or prior to the effectiveness of the registration statement to which this prospectus is a part, we will advise the selling stockholder that they and any securities broker-dealers or others who are statutory underwriters will be governed by the prospectus delivery requirements under the Securities Act. Under applicable rules and regulations under the Securities Exchange Act, any person engaged in a distribution of any of the shares may not simultaneously engage in market activities with respect to the common stock for the applicable period under Regulation M prior to the commencement of such distribution. In addition and without limiting the foregoing, the selling security owners will be governed by the applicable provisions of the Securities Exchange Act, and the rules and regulations thereunder, including without limitation Rules 10b-5 and Regulation M, which provisions may limit the timing of purchases and sales of any of the shares by the selling stockholder. All of the foregoing may affect the marketability of our securities.

On or prior to the effectiveness of the registration statement to which this prospectus is a part, we will advise the selling stockholder that the anti-manipulation rules under the Securities Exchange Act may apply to sales of shares in the market and to the activities of the selling security owners and any of their affiliates. We have informed the selling stockholder that they may not:

- engage in any stabilization activity in connection with any of the shares;

- bid for or purchase any of the shares or any rights to acquire the shares,

- attempt to induce any person to purchase any of the shares or rights to acquire the shares other than as permitted under the Securities Exchange Act; or

- effect any sale or distribution of the shares until after the prospectus shall have been appropriately amended or supplemented, if required, to describe the terms of the sale or distribution.

We have informed the selling stockholder that they must affect all sales of shares in broker's transactions, through broker-dealers acting as agents, in transactions directly with market makers, or in privately negotiated transactions where no broker or other third party, other than the purchaser, is involved.

The selling stockholder may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act. Any commissions paid or any discounts or concessions allowed to any broker-dealers, and any profits received on the resale of shares, may be deemed to be underwriting discounts and commissions under the Securities Act if the broker-dealers purchase shares as principal.

In the absence of the registration statement to which this prospectus is a part, certain of the selling stockholders would be able to sell its shares only pursuant to the limitations of Rule 144 promulgated under the Securities Act.

LEGAL PROCEEDINGS

On October 27, 2003 we filed suit in the Circuit Court of the Twelfth Judicial Circuit of Florida in and for Sarasota County, Florida, Civil Division moving for an emergency order requiring impoundment of any and all computers and associated materials of one of our former employees. On October 28, 2003, the Circuit Court Judge granted the order. The order was carried out on the same day.

Our Complaint alleges that a former employee inappropriately took confidential company materials and then disclosed or threatened to disclose the information. The Complaint seeks return of the property, a permanent injunction against further and future disclosures by the former employee, attorney's fees and related costs.

On December 19, 2003, the former employee filed an Answer, Affirmative Defenses, and Counterclaim with the Court generally denying the allegations of our claim. In addition, the Defendant counterclaimed and sued us for breach of an Employment Agreement, based on a purported failure to pay certain health benefits, and stock options.

On January 9, 2004, the Court granted our Motion to Inspect, Examine and Download Information from the Impounded Computer, subject to certain limitations designed to protect the confidentiality of any information contained on the computer.

The Defendant withdrew his objection to our review of documents downloaded from his seized home computer. Based upon our review of the documents and report, we advised the Court that we believed these documents contained our confidential, proprietary and trade secret information. At that time the Court ordered a preliminary mediation to discuss resolution of the matter. We participated in the mediation, but did not reach a resolution with the Defendant. Therefore, we are proceeding with discovery.

DIRECTORS, EXECUTIVE OFFICERS, PROMOTERS AND CONTROL PERSONS

Our directors are elected at our annual meetings by a plurality of the shares represented and our officers serve at the pleasure of the Board of Directors. Our current officers and directors are:

Name	Age	Position
Tony Frudakis	40	Director, Secretary, Chief Scientific Officer
Richard Gabriel	58	Director, Chief Executive Officer, President
Hector Gomez	68	Director, Chief Medical Officer
Karen Surplus	47	Chief Financial Officer, Principal Accounting Officer

Tony Frudakis, Ph.D. Dr. Frudakis, our founder, has been with us since our inception. He has served in many capacities, including Chief Executive Officer and President. Dr. Frudakis now serves as Chief Scientific Officer and is responsible for executing research and development goals and objectives, under the direction of the Board of Directors. As a member of the Board of Directors, Dr. Frudakis also participates in strategic planning, concentrating on his field of expertise, biologic and genomics science and innovation. Prior to joining us, Dr. Frudakis founded GAFF biologic, our predecessor in interest, in 1998. He served as its President and Chief Executive Officer. Early in his career, Dr. Frudakis was a research scientist for Corixa Corporation. While at Corixa he developed several new techniques for RNA fingerprinting, managed and executed high-throughput gene discovery programs for various cancers and was instrumental in the company's early success in attracting research and development partners. In all, his work has resulted in a patent portfolio for over 350 unique genes and 2 products.

Richard Gabriel. Mr. Gabriel joined us in 2002 as a member of our Board of Directors. He continues in that capacity and in addition, in March of 2003, he agreed to accept the position of Chief Executive Officer and President. In this role, Mr. Gabriel is responsible for and oversees all aspects of the organization and formulates and communicates strategic direction. Prior to joining us, Mr. Gabriel consulted for several start-up companies while working as a partner at Genbiomics, LLC and as head of Life Sciences Practice at Semaphore, Inc. From 1998 until 2001, Mr. Gabriel served as Chief Executive Officer and President of Calix Corporation, parent company to Pharm-Eco Laboratories, Inc. He was one of five Core Team Members that set the overall strategic direction for Pharm-Eco Laboratories, Inc. and helped guide Pharm-Eco's high performance self-directed organization. He obtained his MBA from Suffolk University's Executive MBA Program, Boston, Massachusetts in 1985 and his B.S. in Chemistry from Ohio Dominican College, Columbus, Ohio in 1978.

Hector Gomez MD, Ph.D. Dr. Gomez has served on our board of directors since March 1, 2002 and serves as Chairman of the Board. In addition, in May of 2003, Dr. Gomez agreed to join us as Chief Medical Officer. In this capacity, he is responsible for overseeing and managing our efforts to commercialize our pharmacogenomic products. Mr. Gomez is Chairman of the Audit Committee. From 2001 to 2002, he was Chief Executive Officer of Zengen, Inc., a biotechnology company. From 2000 to 2001, he was Chief Executive Officer of Nutri Logics, Inc., a consumer products company. Prior to joining Nutri Logics, from 1994 to 1999, he was Chief Executive Officer of Transcend Therapeutics, a biotechnology company. Concurrent with these positions, since 1999, Dr. Gomez has served as a Clinical Associate Professor of Pharmacology and Medicine at the University of South Florida, College of Medicine (voluntary faculty). His research career to date has focused on the clinical pharmacology of Hypertension, Hypokalemia, Hyperglycemia, Hyperuricemia and Hypercholesteremia drugs.

Karen Surplus. In June of 2006, Ms. Surplus joined us as our Chief Financial Officer and Principal Accounting Officer. From 2003 until that time, Ms. Surplus had served as a consultant to our Company. From 1999 to 2003, she was Chief Financial Officer of Digital Fusion, Inc., a public information technology company. Prior to that, she served

as Chief Accounting Officer from 1995 to 1999 for PowerCerv, Inc., a public company, and controller for a subsidiary of Progress Energy, Inc. for eight years. Ms. Surplus is a certified public accountant, obtained a Bachelor of Science degree with an emphasis in accounting from Kansas State University, and earned a Masters degree from the University of Tampa.

AUDIT COMMITTEE

We do not have a separate Audit Committee. Our full board performs the functions normally designated to an Audit Committee. Although we do not have an Audit Committee, Ms. Surplus is our Audit Committee Financial Expert. She has an understanding of generally accepted accounting principles and financial statements and has the ability to assess the general application of such principles in connection with the accounting for estimates, accruals and reserves. She also has over 20 years experience preparing and evaluating financial statements that had a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can reasonably be expected to be raised by our financial statements. She has an understanding of internal controls and procedures for financial reporting and an understanding of audit committee functions. Because of her position as Chief Financial Officer, Ms. Surplus is not "independent" with respect to the Company.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth, as of March 31, 2007 certain information concerning beneficial ownership of shares of our stock and the approximate percentage of shares of our stock owned by (i) each person known to us to own 5% or more of the outstanding shares of stock, (ii) each director and executive officer, and (iii) all directors and executive officers as a group.

Name And Address Of Beneficial Owner [1]	Amount Of Beneficial Ownership	Percentage Of Class [2]
Tony Frudakis	21,562,829[3]	3.88%
Richard Gabriel	23,000,000[4]	4.12%
Hector Gomez	19,890,300[5]	3.57%
Directors and Officers as a Group (3 persons)	64,453,029	10.82%

(1)

Unless otherwise noted, c/o DNAPrint Genomics, Inc., 1621 West University Parkway Sarasota, FL 34243.

(2)

Percentage of ownership is based on 537,933,964 shares of common stock outstanding on March 31, 2007.

(3)

Represents 3,062,829 shares directly owned by Dr. Frudakis and 18,500,000 shares which may be acquired within 60 days by exercise of options.

(4)

Represents 1,500,000 shares directly owned by Mr. Gabriel, 18,500,000 shares which Mr. Gabriel may acquire within 60 days by exercise of options, 1,000,000 shares directly owned by Mr. Gabriel's wife, Monica Tamborini, and 2,000,000 shares which Ms. Tamborini may acquire within 60 days by exercise of options. Mr. Gabriel and Ms. Tamborini are married.

(5)

Represents 1,260,300 shares directly owned by Dr. Gomez, and 18,630,000 shares which may be acquired within 60 days by exercise of options.

DESCRIPTION OF SECURITIES

AUTHORIZED CAPITAL

Our total number of our authorized shares of common stock is 1,500,000,000 with a par value of $0.01 per share. Additionally, we are authorized to issue 10,000,000 shares of Preferred Stock, of which 50,000 are designated Series A.

COMMON STOCK

The holders of the common stock are entitled to receive, when and as declared by the Board of Directors, out of any assets of the Company legally available therefore, such dividends as may be declared from time to time by the Board of Directors.

Upon the liquidation, dissolution or winding up of the Company, either voluntary or involuntary, the holders of common stock will be entitled to receive the assets of the Company in accordance with the provisions of the By laws. The common stock is not redeemable. The holder of each share of common stock shall have the right to one vote, and shall be entitled to notice of any stockholders meeting in accordance with the our Bylaws, and shall be entitled to vote upon such matters and in such manner as may be provided by law. There shall be no cumulative voting.

PREFERRED STOCK

Each holder of a share of Series A preferred stock has the right to one vote for each share of common stock into which such holder's shares of Series A preferred stock could then be converted. The liquidation value is $10 per share.

INTEREST OF NAMED EXPERTS AND COUNSEL

No expert or counsel will receive a direct or indirect interest in the small business issuer or was a promoter, underwriter, voting trustee, director, officer, or employee of DNAPrint Genomics, Inc. Nor does any such expert or counsel have any contingent based agreement with us or any other interest in or connection to us.

DISCLOSURE OF COMMISSION POSITION OF INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Our Articles of Incorporation eliminate liability of our directors and officers for breaches of fiduciary duties as directors and officers, except to the extent otherwise required by the Utah Revised Statutes and except where the breach involves intentional misconduct, fraud or a knowing violation of the law. Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, we have been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act, and is, therefore, unenforceable.

DESCRIPTION OF BUSINESS

HISTORY

We initially incorporated under the laws of the State of Utah on January 3, 1983 as Lexington Energy, Inc. and subsequently changed our focus to human genome sciences. In connection with this change in focus, on July 15, 2000, we acquired DNAPrint Genomics, Inc. through the issuance of 9,600,000 shares of our common stock. After the acquisition, we focused on the discovery and development of our TruLine products - TruSeq, SNiPscan and TruSpin. We actively engaged in human identification analysis and used our proprietary TruLine products to reduce the cost of producing a genetic profile to less than 50% of the standard price. Our strategy was to sell our proprietary reagent to geneticists at universities, hospitals and commercial laboratories working on genotyping projects. The reagent kit was designed to save researchers money in reagent costs. Companies that sold the reagents, however, made advances in their own reagents, which lowered the cost and ultimately negated the benefit of using our products. The technology was thus abandoned.

In 2001, Dr. Tony Frudakis, our founder, teamed with other scientists to conduct research to develop new genomics products with consumer, forensic and pharmacogenomics applications. However, lack of funding limited the amount of research conducted. We implemented cost cutting measures to conserve cash. In spite of these hardships; we were able to continue our research and development efforts on a reduced and limited basis throughout most of 2002 and

2003. During 2002, our Board of Directors began a search for new leadership. After a search for a new Chief Executive Officer/President, Mr. Richard Gabriel agreed to accept the position without requiring immediate cash compensation. Because we did not have cash available to pay Mr. Gabriel's salary, he agreed to enter into an employment contract for one year that granted him 1,500,000 shares of our stock in lieu of immediate cash compensation.

As Chief Executive Officer and President, Mr. Gabriel agreed to seek additional executive management, particularly a Chief Financial Officer, a Chief Operating Officer and a Chief Medical Officer and to locate a firm to represent us in raising investment capital sufficient to build and sustain the business over the next 2-3 years. Mr. Gabriel and the new management team successfully completed these goals. Mr. Gabriel hired our former Chief Financial Officer and Chief Operating Officer, Monica Tamborini, and our Chief Medical Officer, Dr. Hector J. Gomez. In May of 2003, Mr. Gabriel also convinced Ms. Tamborini and Dr. Gomez to agree to work initially without requiring immediate cash compensation. They agreed to enter into employment contracts with us for one year in return for stock grants of 1,000,000 and 1,250,000 shares respectively.

With executive management in place, we next developed a strategic plan to achieve our short-term goal of securing financing and our longer term goals of growth and stability. Where prior management saw partnering and licensing arrangements as the way to success, new management's view was that growth would occur with proven success. Management has emphasized demonstrating that our current products are viable, and management believes the shortest path to that goal is through concentrating our initial sales efforts on the consumer and forensic markets.

While we expect pharmacogenomics products to outperform other market products in the long run, their introduction to market has a longer time horizon and requires larger investments of time, personnel and capital before they produce revenue and generate cash flow.

Management sought investment bankers to represent us in our search for financing. In April 2003, we engaged an investment banking firm to assist us in our efforts to raise debt and/or equity capital. In December 2003, we successfully agreed to place $8,000,000 of our securities over approximately a 20-month period. Prior to completing this transaction, we had received funds from earlier private offerings. Together, these transactions gave us the critically required capital to fund our ongoing operations until our new financing was in place. In addition to the previously raised capital, management sought additional capital to fund expansion and acquisitions. Along with our investment bankers, we secured a commitment from Dutchess Private Equity Partners, LLC for the sum of $35 Million over a 24-month period which expired in May 2007. We also negotiated to acquire a stake in Biofrontera, a privately held German Biotechnology company. At the time of the transaction, Mr. Richard Gabriel and Ms. Monica Tamborini were common, non-voting shareholders of less than 1% combined ownership in Biofrontera AG. Mr. Gabriel was made aware of the opportunity to invest in Biofrontera AG and presented it to our Board of Directors and was given instructions to proceed with the investment opportunity.

Effective September 28, 2004, we agreed to acquire a majority interest in Biofrontera AG over a 24-month period for a purchase price of 20 million Euros. Prior to the closing of the transaction, however, we concluded that proceeding with the proposed acquisition was not in our best interest. Therefore, we terminated the Biofrontera agreement on February 18, 2005.

On July 8, 2005, we entered into an agreement to purchase, and simultaneously closed upon the purchase of, an equity interest in Biofrontera. We purchased the interest in Biofrontera from Technologie-Beteiligungs-Gesellschaft mbH, an instrumentality of the German government. The securities purchased were shares of Biofrontera's series A Preferred Stock, as well as certain debt instruments. On August 8, 2005, we converted the securities purchased into Biofrontera's common stock. We paid approximately 1.8 million Euros, or $2.1 million, for our interest in Biofrontera. On September 19, 2005, we paid an additional 98,245 Euros, or $121,000, for an additional 98,145 shares of Biofrontera common stock, increasing our ownership of Biofrontera to approximately 18% at that point in time. In connection with the transaction, two of the members of our Board of Directors, Richard Gabriel and Hector Gomez, were retained on the Biofrontera board. During September 2005, Biofrontera completed its debt securities offering. At that time, the board seat previously held by Hector Gomez was filled by a representative of the debt securities group. Beginning in October 2006, Biofrontera securities were traded on the German public exchange. To fund our current operations and make loan payments, during December 2006 and January 2007, we sold 82,000 shares of Biofrontera stock. During February 2007, we entered into an agreement to sell the remaining shares. The securities in Biofrontera AG that we held were under a lock-up agreement with the DZ Bank in Germany and the lock-up was assumed by the acquiring party. The lock-up period remains in effect until October 31, 2007, and the securities were not sold or intended to be sold as publicly traded shares.

We acquired Trace Genetics late in the second quarter of 2005. Trace Genetics brought two new complementary technologies to our autosomal testing for determining the percentage of a person's ancestry: Y-chromosome testing for tracing ancestry by following the direct paternal line and mitochondrial, or mtDNA, testing for the direct maternal line. Trace also maintains one of the largest Native American mtDNA databanks in North America. Other similarly

large databases are controlled by groups such as the Sorensen foundation, various Native American foundations and tribes, and some Universities.

On October 12, 2005, we formed DNAPrint Pharmaceuticals, Inc., a wholly-owned pharmaceutical subsidiary focused on personalized medicine.

On October 25, 2005, we acquired all of the stock of Kenna Technologies, Inc. Kenna develops software and related technologies for building computational models that mimic complex biological systems. We expect that Kenna's computational models will become key components for our development of more effective therapies and diagnostic products. In acquiring Kenna, we also gained access to Kenna's BoneFusion and CellCycleFusion models, which simulate bone remodeling processes and molecular pathways. These pathways are common targets of current cancer therapies. We exchanged 1,500,000 shares of our common stock for all the outstanding shares of Kenna. In addition, we hired certain key employees of Kenna, including Drs. Barbara Handelin and Tandy Herren, who support the clinical development of our pharmacogenomics products with simulations to help design optimal clinical trials.

On November 30, 2005, we acquired certain assets used in the drug and diagnostic discovery business of Toronto-based Ellipsis Biotherapeutics Corporation. We formed a wholly-owned Canadian company, also named Ellipsis Biotherapeutics Corporation, to operate these assets. Ellipsis performed contract SNP, or single nucleotide polymorphisms, genotyping for academic centers, hospitals, human health care corporations and biotech companies. Its diverse services include human, plant and animal analyses.

The acquired assets consisted of Ellipsis' operating assets, including genotyping equipment, automated sample preparation devices, DNA preparation, measurement and amplification technologies, laboratory equipment, computers and office supplies related to these activities, the corporate premises, name and logo and certain intellectual property and committed contracts. We anticipate that the Ellipsis assets will assist with clinical genomics and genotyping. In consideration for the Ellipsis assets, we issued 6,500,000 shares of our common stock and assumed certain liabilities in the approximate amount of $600,000. Dr. Laurence Rubin has agreed to continue managing the operations in Toronto.

During March 2007, we entered into another agreement with Dutchess where we secured a commitment from Dutchess Private Equity Partners, LLC for the sum of $10 Million over a five-year period.

THE PHARMACOGENOMICS MARKET

A 1998 study of hospitalized patients published in the Journal of the American Medical Association reported that in 1994, adverse drug reactions accounted for more than 2.2 million serious cases and over 100,000 deaths, making adverse drug reactions, or ADRs, one of the leading causes of hospitalization and death in the United States. As noted by Ross and Ginsburg in the American Journal of Clinical Pathology, "As many as 20% to 40% of people receiving pharmaceutical agents may be receiving the wrong drug."

Currently, there is no simple way to determine whether people will respond well, badly, or not at all to a medication; therefore, pharmaceutical companies are limited to developing drugs using a "one size fits all" system. This system allows for the development of drugs to which the "average" patient will respond. However, as the statistics above show, one size does not fit all, sometimes with devastating results. As discussed at the March 11, 2006 American Society for Clinical Pharmacology and Therapeutics Conference by Janet Woodcock, M.D. Deputy Director of the

FDA, the American medical system cannot afford to continue to ignore the obvious variability in how individuals respond to most drugs. There is increasing obligation for the pharmaceutical industry - and the regulatory oversight agencies - to use all available knowledge and technologies to accelerate the development of drugs that can be prescribed with better understanding of which patients can safely take which medicines that also will be effective treatment from them. Dr. Woodcock also said:

"At the FDA, we currently see only a trickle of applications containing pharmacogenomic information, but we expect this trickle to become a flood over the next five years. And this is only good news for patients and their families. For the first time, physicians will have a chance to treat people as individuals, not as members of a "population." We will also be able to treat patients based on the actual biology of the disease--not just according to their symptoms. People often have similar symptoms, but actually have very different underlying diseases that need different treatments. The pharmacogenomics revolution gives us a chance to sort this out and to treat people with the kind of therapy that's appropriate for them, personally. This gives all of us the chance to fulfill the promise of the entire discovery and all the investment in biological science that's been going on during the last 30 years. And it will really help and enhance the health of all Americans."

Testing individuals to predict their genetic pre-disposition to drug response is known as pharmacogenomics. The term comes from the words pharmacology and genomics and is thus the intersection of pharmaceuticals and genetics. Pharmacogenomics enables physicians to tailor drug therapies, including formulation and dosage, for individuals based on their genetic composition. By using predictive response genetic testing, rates of therapeutic success, known as treatment efficacy, are increased, and ADRs, are decreased. Pharmacogenomics combines traditional pharmaceutical sciences such as biochemistry with annotated knowledge of genes, proteins and single nucleotide polymorphisms, known as SNPs. According to Human Genome Project Information, (www.ornl.gov/sci/techresources.Human_Genome/medicine/pharma.shtml), Pharmacogenomics is anticipated to provide the following benefits:

- More powerful medicines that are targeted to specific diseases. This will maximize therapeutic effects and decrease damage to nearby healthy cells.

- Better, safer drugs the first time by analyzing a patient's genetic code or important segments of the patient's code versus trial and error prescribing based on reviewing the impact of a drug after a patient takes it.

- More accurate methods of determining appropriate drug doses not based only on a patient's weight or body mass but also based on the patient's metabolism. This will maximize the therapy's value and minimize the chance for overdose.

- Improvements in the drug discovery and approval process because trials are targeted for specific genetic population groups providing a higher chance of success. This can reduce costs of trials and risk of side effects. Previously failed drug candidates might be revived if they can be matched appropriately with a specific population.

- Decreases in overall cost of health care because of reduced ADRs, reduced failed drug trials, shortened FDA drug approval timeframes, limited treatment duration because the drug is more effective, linked to early detection and resulting in better preventative care.

A pharmacogenomics test is taken from the patient either through a blood sample, tissue sample or a mouth swab. The DNA is then extracted from the swab, blood or tissue and analyzed by our scientists on the gene analysis machines that we have. The data is analyzed and compared to other data that we have obtained to identify the results. From this data that we obtain from the DNA, we are able to provide the physician and the patient with information regarding the potential effect of a drug upon that patient. This test uses identified genetic markers and our genetic ancestry markers to determine the suitability of a drug or treatment for a particular patient. We have not as yet obtained FDA approval under section 510k and currently do not provide any information to physicians or patients that may influence their treatment regimes.

The major barrier to pharmacogenomics progress is complexity of the research efforts that are still in early stages of finding gene variations that affect drug response. Millions of SNPs must be potentially identified and analyzed to see if they affect drug responsiveness. Additionally, many genes work in combination and thus, understanding the impact of combinations of SNPs will be critical. Unfortunately, this effort is also time consuming and expensive.

In November 2003, the FDA issued "Guidance for Industry Pharmacogenomic Data Submissions." We believe that, in this guidance, the FDA offers support for pharmaceutical companies developing drugs using genetic testing and genomic research for drug approvals. Under the guidelines, if a genetic test is new or is not widely accepted, then its use is `voluntary' to the drug's submission. If a test is `validated and accepted' then the guidelines suggest its inclusion in the submission. In both cases, our products and services can provide a valuable tool for drug development. We can help identify patients who might not respond favorably to a new medication, either by failure to gain the intended treatment objective or by expression of an adverse reaction, and thus eliminate those patients from the treatment or clinical trial. This testing could improve the drug's efficacy statistics because there may be fewer non-responders in the trial and reduce its toxicity profile because there would be fewer individuals who have an adverse drug reaction. This testing may increase the likelihood that the drug meets FDA requirements and gains market approval.

During 2005, the FDA issued a mandate to include pharmacogenomics as part of the New Drug Development Process. This mandate has been most recently declared in two publications: the Guidelines for *Pharmacogenomic Data Submission* dated March 22, 2005, and the Concept Paper: *Drug-Diagnostic Co-Development (Theranostics)* dated April 11, 2005.

OUR PHARMACOGENOMICS PRODUCTS

Pharmacogenomics is the study of the relationship of a person s genetic profile and how it reacts in response to disease and the pharmaceutical treatment of that disease. We are developing diagnostic tests which are used to identify which patients have the highest likelihood of gaining therapeutic benefit from drug treatment also known as theranostics products which is defined as the combination of a drug and diagnostic test under one FDA approved label. Currently all of our pharmacogenomics products and tests are in research and development and we have not derived any revenues from our pharmacogenomics projects to date.

A pharmacogenomics test is taken from the patient either through a blood sample, tissue sample or a mouth swab. The DNA is then extracted from the swab, blood or tissue and analyzed by our scientists on the gene analysis machines that we have in our laboratories. The data is analyzed and compared to other data that we have obtained to identify and qualify the results of the analysis. From this DNA analysis, we are able to provide the physician and the patient with information regarding the potential effect of a drug upon that patient. This test uses identified genetic markers and our genetic ancestry markers to determine the suitability of a drug or treatment for a particular patient. We have not as yet obtained FDA approval under section 510k and currently do not provide any information to physicians or patients that may influence their treatment regimes. We continue to perform research and development using our techniques and practices but we have not yet submitted any data for FDA review and comment for any of our diagnostic or drug and diagnostic combinations.

The company is developing drugs and diagnostics products. All our drug programs described are development projects for prescription medicines that will have to be approved by the FDA before going to the market. The full development process from the initial laboratory up to the market place is listed below:

- Discovery
- Preclinical
- File for Investigational new drug application with the FDA at this time

- Clinical Phase I
- Clinical Phase II
- Clinical Phase III
- File for new drug application with the FDA at this time
- Registration of product
- Take product to market

In October 2005, we created a new subsidiary, DNAPrint Pharmaceuticals, to focus on delivering diagnostic and theranostic products to the market in support of pharmacogenomic opportunities. We are developing several theranostics projects. Theranostics are the combination of a drug and diagnostic test. We believe theranostics adds value to the clinical trial process, improves the real-time treatment of disease, and makes treatment more cost-effective. For each of our theranostics projects, we are developing a test to help predict the patients response to a drug and a drug that can be given to the patient if they are a good candidate for the drug based upon the genetic testing. Both the drug and the test are under development. The following table contains our theranostics projects for specific indications that are in development as of March 2007:

	THERANOSTICS INDICATION
PT-401	Anemia - Renal Failure
PT-501	ADHD
PT-502	Drug Addiction
PT-503	Depression

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PT-401 Anemia - Renal Failure: As announced on March 14, 2006, tests of our Super EPO dimer in animal models of anemia showed that it was several times more effective and longer acting than the currently available erythropoietin. In vitro testing in cell cultures revealed significant positive biological activity. In addition, in vivo testing in mice demonstrated robust stimulation of red blood cell production. Further analytical testing showed unique biochemical properties that distinguish it from currently marketed red blood cell growth stimulating drugs. This project is in the preclinical stage. We anticipate filing the investigational new drug application also known as the IND with the FDA for this product in 2008 and filing the new drug application with the FDA during 2010. These timeframes assume we will be able to complete clinical trials and the results of those trials will be favorable. There is a high likelihood that these timeframes could take longer and only a small percentage of drug candidates that begin clinical trials are ultimately approved.

PT-501 ADHD, PT-502 Drug Addiction, PT-501 Depression: In January 2006, we entered into a Research Sponsorship Agreement with the Massachusetts College of Pharmacy and Health Sciences for the potential development of compounds as possible medications for drug abuse, attention deficit hyperactivity disorder and depression. These projects are in the preclinical stage. For PT-501 and PT-502, we anticipate filing the investigational new drug application during 2008 and the new drug application with the FDA during 2011. For PT-503, we anticipate filing the investigational new drug application with the FDA during 2009 and the new drug application with the FDA during 2012. These timeframes assume we will be able to complete clinical trials and the results of those trials will be favorable. There is a high likelihood that these timeframes could take longer and only a small percentage of drug candidates that begin clinical trials are ultimately approved.

OUR DIAGNOSTIC PROJECTS

For each of our diagnostic projects, we are developing a test to help determine which patients might react to the particular indication (ie. might have a high likelihood of developing pre-diabetes diabetic complications) and then the patient can seek the appropriate treatment as needed based upon their response to the test.

Our diagnostic programs will also have to be approved by the FDA but they can be offered initially as a research service to doctors prior to any FDA approval and later on will be submitted to the FDA for approval of the test to be used by consumers before going to the market.

A diagnostic test follows several stages of development as shown in the graph below:

We currently have the following diagnostic projects under development:

DIAGNOSTICS	INDICATION
OVANOME	Ovarian Cancer
STATINOME	Safety of Statins
DIABETES-CD59	Pre-diabetes Diabetic Complications
PONV	Post-Operative Nausea and Vomiting

Ovanome: We began a study with Genomics Collaborative Division of SeraCare Life Sciences, Inc. Samples have been received from them and used to conduct a validation of the test. There is no formal agreement. We have acquired the samples from SeraCare for $141,596 and own any research and development from our work. We believe this has advanced the development and improved the quality of the diagnostic test for ovarian cancer. This diagnostic product is in Phase I of the process.

Statinome: During 2005, we began a study with Genomics Collaborative Division of SeraCare Life Sciences, Inc. that also included the Statinome program. We are developing a test to determine how patients react to certain statins. Statins are drugs used to treat high cholesterol and help prevent or slow down the progression of heart disease. Samples have been received from SeraCare for $116,262 and used to conduct a validation of the test. An abstract was presented at the last meeting of the American Society of Clinical Pharmacology and Therapeutics which was held on March 10, 2006 in Baltimore. Also, a paper has been prepared and submitted for publication. This diagnostic product is in Phase I of the process.

Diabetes C59: On January 24, 2006, we entered into an exclusive license agreement with Harvard College through the Laboratory for Translational Research at Harvard Medical School. The Harvard license agreement provides for sponsored research and the clinical development and commercialization of a diagnostic test targeting early identification of the population at risk of developing vascular diabetic complications. The research is being conducted under the supervision of Dr. Jose Halperin. This diagnostic product is in Phase II of the process and we anticipate to offer it as a research service to doctors in 2008, before obtaining FDA approval for the kit in 2009-2010. The FDA approval timeframe assumes we will be able to complete clinical trials and the results of those trials will be favorable. There is a high likelihood that these timeframes could take longer and only a small percentage of products and services that begin clinical trials are ultimately approved.

PONV is a diagnostic test that will assist in selecting appropriate anesthesia and pain management treatments. There is increasing evidence that certain individuals may have a predilection to nausea and vomiting in response to routine anesthesia and certain post operative pain medications. On average, 50% of individuals undergoing routine, non-abdominal surgery under general anesthesia will experience post operative nausea, and 30% or more will have vomiting in recovery that requires drug therapy to prevent complications.

OUR GROWTH STRATEGIES IN THE PHARMACOGENOMIC MARKET

By leveraging our proprietary technologies, we believe we are positioned to serve the growing compliance and operational needs of pharmaceutical companies and institutional researchers. We will continue to seek product and market relationships that expand and enhance our ability to apply our technology to existing medications or new medications, improving drug efficacy and reducing patient side effects by better understanding the genetic makeup of individuals. We believe the future of drug development and drug approval as outlined by recent FDA writings will force the industry to recognize smaller market opportunities with higher efficacy profiles and significantly reduced or diminished side effects.

We will continue work on Ovanome, a Taxol screening diagnostic test, and Statinome, a test for the cardiac drug market, which are both currently under development. Our Ovanome technology is under development with researchers at the Moffitt Cancer Center in Tampa, Florida, and we are in the midst of completing an initial 80-person trial under an approved Internal Review Board, or IRB, which approves all clinical trial related work at the center. We are also enrolling an additional 200 subjects to further validate and support the data we obtained in our earlier trial. We will continue to explore joint venture opportunities, particularly within the pharmacogenomic segment, in order to potentially expand our position within the pharmaceutical market. A major goal of our joint venture program is to seek opportunities for a drug pipeline acquisition. Our recent licensing of a 'Super' Erythropoietin, or Super EPO, molecule from Beth Israel Deaconess Hospital is a step forward in that direction. We plan to combine our ability to screen patients and track patient response to the standard form of EPO when compared to our newer, 'Super EPO.' We believe this will improve our clinical efficacy and reduce the unwanted side-effects of standard EPO treatment for anemia.

In October 2005, we acquired Kenna Technologies. Kenna develops software and related technologies for building computational models that mimic complex biological systems. By acquiring Kenna, we also gained access to Kenna's BoneFusion and CellCycleFusion models, which simulate bone remodeling processes and molecular pathways. These pathways are common targets of current cancer therapies. Utilizing these models may lead to shorter drug development timelines and thus reduced costs as they help in the design of optimal clinical trials. Computational models, developed with our proprietary methods, test multiple complex scenarios of dosing, patient factors, disease progression over time, genetic variation in drug response and can provide insight into the potential outcomes of long-term treatments which are too costly to test in human studies. We are currently using these models with respect to the PT-401 Super EPO project and will use these and other models in our research and development of our products. We also hired certain key employees of Kenna, including Drs. Barbara Handelin and Tandy Herrin, who will support the clinical development of our PT-401 with simulations to help design optimal clinical trials.

THE FORENSICS MARKET

Testing DNA from a crime scene to create a physical profile is a new market based on evolving technologies. Common hereditary traits such as skin pigmentation, eye color, hair color, earlobe attachment and height can theoretically be predicted through analysis of DNA sequences. We believe that we are the first to use DNA gathered as evidence from a crime scene to successfully predict the donor's continental genetic origin and linking that to our photo-database gallery, providing law enforcement officers with a general description of the donor.

There are approximately 5,200,000 reported incidents of violent crime, comprised of rape, robbery, and aggravated assault, in the U.S. each year according to the Homicide Trends in the United States. In the vast majority of violent crimes, DNA evidence is left at a crime scene or on a victim's body. Of these 5.2 million reported incidents, a small percentage of the cases result in arrests. Forensic DNA tests can enable a greater degree of success in prosecuting violent criminals.

OUR SERVICES FOR THE FORENSICS MARKET

We created DNAWitness 2.5 for the forensics market. Law enforcement officers use this testing service to determine genetic heritage from DNA samples obtained from crime scenes, saving time and money by narrowing the list of potential suspects. Current forensic DNA products in the market act like a fingerprint and can only be used to match DNA specimens. To our knowledge, DNAWitness is the first forensic product that provides predictive capability. DNAWitness provides the percentage of genetic make up amongst the four possible groups of Sub-Saharan African, Native American, East Asian, and Indo-European. When appropriate, DNAWitness allows for a breakdown of the European ancestry into four components: Northern European, Southeastern European, Middle Eastern and South Asian. The results of these tests can be very useful for inferring certain elements of physical appearance.

DNAWitness has been used in several law enforcement cases. The Louisiana Serial Killer Case was one case where the use of DNA Witness was considered a major contributor to identifying the killer who has since been convicted and sentenced. This case was featured at an educational workshop for law enforcement at the American Academy of Forensic Scientists in February 2006. Additionally, DNAWitness received national attention when police made an arrest in a case involving the double murder of two women in Napa, California, after narrowing down a list of potential suspects. The test eliminated an entire group of individuals who worked and lived in the Napa Valley area as potential suspects. Initial DNAWitness 2.5 customers include medical examiner's offices, special task forces, sheriffs' departments, and district attorney's offices from various cities. Initial response from preliminary application of this forensics version to various high profile criminal cases has been promising.

Our DNAWitness™ services suite now includes:

DNAWitness™ 2.5 -- Tests crime scene DNA to assist detectives, forensic scientists and medical examiners in corroborating eyewitness reports and confirming suspect identities. DNAWitness 2.5 provides a BioGeographical Ancestry report that includes a photo database for reference samples of individuals. Reported ancestral origins are Sub-Saharan African, Native American, East Asian and Indo-European.

EuroWitness™ 1.0 -- Tests crime scene DNA to determine more specific geographic origins if the test sample ancestry is 50% or more Indo-European. EuroWitness™ 1.0 provides a BioGeographical Ancestry report that includes relative percentages of Northern European, Southeastern European, Middle Eastern or South Asian.

Retinome™ -- A predictive test for individual eye color from DNA. RETINOME predicts eye color if the sample is 50% or greater European ancestry as to whether eye color is blue, mostly blue, brown or mostly brown. A representative eye photo database is also provided along with relevant photo database pictures of the individual references.

STR-Witness™ -- A genetic "matching" used as a bar code to track and report the samples. STR-Witness is the same test used for determining an individual's identity from an available DNA sample. Crime labs run this test to screen the Federal Bureau of Investigation's Combined DNA Index System, or CODIS, database for possible matches.

DNAWitness-Y™ -- A Y-chromosome test that determines the direct paternal ancestral lineage from the male sex chromosome. DNAWitness-Y™ can be used as an identification tool in cases where a mixture of male and female samples exists.

DNAWitness-Mito™ -- A mitochondrial DNA test that examines ancestral lineages along the maternal line. DNAWitness-Mito™ can be used as an identification tool when other DNA testing fails to yield results or the DNA sample is too deteriorated.

The forensic Bio-Geographical ancestry testing provided by us has been validated to be sensitive and highly reproducible as discussed in the article Powerful but Requiring Caution: Genetic Tests of Ancestral Origins in the *National Genealogical Society Quarterly,* 93 (December 2005). The reproducibility, sensitivity and accuracy validation studies of DNAWitness have been performed by us and are available online at the validation section of www.DNAwitness.net. Ongoing studies have confirmed the initial validation material as accurate and show the technology to be very reliable. We have also had numerous blind challenges by law enforcement agencies that have been correct and representative of the samples submitted. Studies with the San Diego Police Department Crime lab, the Forensic Science Service of the UK, and National Center for Forensic Sciences at the University of Central Florida were performed from November 2002 to January 2003 and the results were consistent and accurate with the self-described ancestry of all participants. Photographs of some participants and their ancestry scores are available at the above web page. In March 2003, members of the multi-agency task force for the South Louisiana Serial killer submitted their samples in a blind trial. In all cases their results were consistent with the self-described ancestry of the task force members. In addition, we have produced a database of over 4,700 samples of various populations, and ethnic groups, which have been analyzed with the DNAWitness™ technology. The information contained in the database shows consistent results between self-described ancestry, physical features and the results of the technology.

We currently market and distribute our forensic services. At this time, there is no government regulation of these services. The revenues for the above suite of DNAWitness™ services are charged an amount per sample tested. During 2006, we recorded revenues of $50,500 for this suite of DNAWitness™ products.

GROWTH STRATEGY IN FORENSICS

We are investigating avenues to encourage federal, state and local governments, crime laboratories and law enforcement agencies to use DNAWitness to help solve cold cases, current serial killer cases and other violent crimes. By using DNAWitness on a routine basis, witness information can be corroborated, and where no witness is present, DNAWitness can provide a "fuzzy sketch" of the persons who left evidence at a crime scene, possibly reducing the cost and delay inherent to unguided investigation of a large pool of potential suspects Our 2007 plans include seeking American Society of Crime Laboratory Directors or ASCLD accreditation of our laboratory for forensics work tied to court testimony. Once accredited, either through acquisition of another forensic operation or development of our own operation, we will also be able to offer conventional DNA testing to our clients. Accreditation would allow us to capture a greater portion of this market and to offer a full range of services to our clients. We continue to go to trade shows to increase the awareness of our products with the law enforcement community.

THE CONSUMER SERVICES MARKET

The consumer genealogy market is fueled by a natural desire to understand our family lineage and our genetic heritage. It is possible that the market for genetic testing is a passing fad and that public interest in genetic genealogy testing will substantially decrease. There is also a market for paternity and other tests related to family lineage but we do not aggressively pursue this market opportunity at this time. We serve both of these consumer markets through direct sales and independent service providers. Our consumer services are distributed mainly by us. We also have service providers who market and distribute our consumer services. Currently there is no government regulation over ancestry products.

OUR PRODUCTS FOR THE CONSUMER PRODUCT MARKET

We were one of the first companies to offer DNA tests that predict genetic heritage. Additionally, to the best of our knowledge, we offer the only pan-chromosomal assay for genetic ancestry which provides information on a person's maternal and paternal lineages. We currently have a reseller, Sorenson Genomics, LLC, which accounted for $513,837 of our revenue during 2006. We have a basic reseller service provider agreement with them that can be terminated at any time. This agreement provides that we offer Sorenson our basic customer service products for Sorenson to resell and payment terms to us are net, thirty days.

Our genealogy product, AncestryByDNA™ 2.5, provides an inference of an individual's genetic ancestry or heritage. AncestryByDNA™ 2.5 carefully selects and analyzes certain genetic markers from the human genome which are more prevalent in people from one continent versus another. Using complex statistical algorithms,

AncestryByDNA™ 2.5 can determine which of the major bio-geographical ancestry groups, Sub-Saharan African, Indo-European, East Asian or Native American, a person belongs. The genetic test can also determine the relative percentages of these ancestry groups which are present in cases of people of mixed background. We market this product to individuals or groups interested in understanding their lineage or learning more about their genetic ancestry. During 2006, we recorded revenues of $1,145,458 for AncestryByDNA™.

We introduced EuroDNA™ 1.0 in the marketplace in late 2004. The EuroDNA™ 1.0 product measures European sub-ancestry. "European" ancestry, as determined by AncestryByDNA™ 2.5, refers to a type of ancestry shared by people who derived from the Middle East some 50,000 years ago and spread to occupy Europe, the Middle East, parts of Eurasia and South Asia. EuroDNA™ 1.0 breaks the European ancestry into 4 groups, reporting individuals' ancestral percentages for each of the following: Northwestern European, Southeastern European, Middle Eastern and South Asian. During 2006, we recorded revenues of $178,320 for EuroDNA™.

Our Bio-Geographical ancestry testing provided has been validated to be sensitive and highly reproducible as discussed in the article Powerful but Requiring Caution: Genetic Tests of Ancestral Origins in the *National Genealogical Society Quarterly,* 93 (December 2005).

In June 2005, we acquired Trace Genetics, an identity genomics company located in Richmond, California. The company had three ancestry tests that were added to our family of tests. They include:

"Ancestry Mito" mtDNA Test which traces the origin of the customer's direct maternal line, or mother's mother's mother. There are 30 major maternal lineages, or haplogroups, that have been identified worldwide. We can expand this testing further by our Native American mtDNA test which tests the customer's mtDNA sequence against the Native American mtDNA database to see if we can make any tribal matches when the customer is one of 5 haplogroups that are Native American in origin. During 2006, we recorded $166,815 of revenue for these services.

"Ancestry-Y" SNP which traces the origin of the customer's direct paternal line, or father's father's father. There are 18 major paternal lineages, or haplogroups, that have been identified worldwide. Two of the 18 haplogroups are found in Native American populations, Q and C. This test includes these two haplogroups. During 2006, we recorded $87,720 of revenue for this service.

GROWTH STRATEGY IN CONSUMER PRODUCTS

We currently have several service providers that sell our consumer products. We use our service providers as well as Internet and paper-based publication advertising, such as Google and Family Tree magazine, to grow sales of our consumer products. Our consumer sales volumes seem to increase when we are featured in articles and television programs. We have been featured in multiple local and national publications and television programs. We will continue to strive to get the article and television program coverage as well as pursue other avenues of marketing. Our consistent sales come through our service providers. We will also continue to pursue adding service providers to increase our sales volume of our consumer services.

THE CONTRACT SERVICE OUTSOURCING MARKET

Contract genotyping is the process of reading a genetic sequence and identifying differences in the sequence letters. This information helps researchers understand how human differences are expressed at the gene level. We provide universities and drug discovery companies the ability to outsource some or all of their research needs for genotyping. The pharmaceutical and drug discovery segments of the outsourcing market continue to grow.

OUR GENOTYPING SERVICES

We provide services that range from sequencing and genotyping to the entire process of SNP discovery to large industrial customers. Contract genotyping is the process of reading a genetic sequence and identifying differences in the sequence letters. For example, in comparing diseased tissue with normal tissue, we are able to see the differences in the sequence letters. This information helps researchers understand how human differences are expressed at the gene level. They can then search for and develop preventative treatment and effective therapeutic courses to alleviate disease symptoms.

A critical factor to the success of research and development of pharmacogenomics assays is the ability to do high through-put genotyping. To this end, we acquired certain assets from a Canadian company and formed our subsidiary Ellipsis. Ellipsis has a Beckman-Coulter SNPstream that is capable of using a new 48-plex system, which allows for greater capacity of SNP testing at less cost. We currently have a total of three SNPstream machines enabling us to offer testing services that can validate markers at high volumes, which is especially useful in the later stages of drug and diagnostics development during large clinical trials.

Ellipsis also has an Illumina BeadStation 500G system, which also runs very high capacity analysis. The Illumina system is 50 to 100 times higher capacity but is not as efficient from an expense perspective at lower numbers of SNPs making the Illumina a more ideal research tool in screening whole genomes across hundreds of thousands of SNPs.

These platforms enable us to do a variety of testing of DNA samples for pharmacogenomic efforts as well as generating revenue from projects for academic and business organizations. Ellipsis has extensive experience working with DNA samples from a variety of sources and projects, including agricultural to human disease applications.

We currently market and service our genotyping services. Currently there is no government regulation over the services we provide. During 2006, we recorded revenue of $311,742, $147,397 and $187,997 from three different genotyping customers. We do not have any agreements with these customers. We provide them services when they provide us a request and a purchase order. These customers are biotechnology companies, whom we do research projects for them and since these projects are typically not ongoing projects, the customers may not be recurring

customers going forward.

GROWTH STRATEGY FOR CONTRACT GENOTYPING

We continue to pursue customers within the contract genotyping market. To date, our customers have come to us either through client referrals or our general website. In the future, we plan to concentrate our genotyping services on specific diseases, including cancer, neurological disorders, and heart disease. By concentrating on specific diseases, we hope to develop an expertise that will attract customers in those areas requiring external assistance and additional research capacity. Through this strategy, we will continue to build our reputation as a reliable and cost effective supplier of high quality data.

RESEARCH AND DEVELOPMENT

The primary objective of our near term research and development efforts in pharmacogenomics will be to expand our library of predictive drug response tests to include multiple therapeutic areas including commonly used FDA approved drug therapies. Although our products are diverse and address different market areas and needs, the base technology is the same. We believe research in one area will often provide benefit to our other products.

In 2004, we conducted research for enhancements to DNAWitness. The research included much needed sample collection for our eye and hair color studies. In early June of 2004, we introduced a new tool to our forensic customers. We compiled a volunteer photo database that we can use to help investigators visualize the DNA donor. This new tool augments the effectiveness of our product, DNAWitness. During the third quarter of 2004, we completed work on our eye color service, RETINOME, and EuroDNA™, a service that allows customers to determine their Northern European, Southeastern European, Middle Eastern and South Asian ancestry and introduced them to the market. We continue our research work on the STATINOME™ and ace inhibitor projects. We also, in conjunction with researchers at the Moffitt Cancer Center, continue work on OVANOME™ and other identified cancer projects. We continue to evaluate and analyze our preliminary results and to extend those results to other patients' samples for Taxol, Statins, and Ace inhibitor work. Our work in forensics is continuing to expand the physical descriptors that can be derived from crime scene DNA samples. Our research also continues in hair color, skin shade, and we continue to work to improve our recently introduced eye color predictor model. Additionally, we continue to collect volunteer photo database samples and will incorporate those new samples into our forensic photo database array in the near future.

During 2005, we began our work, which is continuing, on Erythropoietin, or EPO, with Beth Israel Deaconess Medical Center and Dr. Arthur Sytkowski, a director at Beth Israel. EPO is a glycoprotein naturally made by the body to stimulate red blood cell production; the currently marketed forms are manufactured using recombinant DNA technology and are used to treat anemia or low blood cell count. During 2006, we began working with KBI BioPharma for the production development of our EPO product.

Also during 2005, we entered into an agreement with Dr. Mark Froimowitz to develop a series of methylphenidate analogs or Ritalin-like compounds targeting the clinical development of enhanced pharmaceuticals for the treatment of drug addiction, attention deficit hyperactivity disorder and depression.

During 2006, we began our work, which is continuing, on CD59 with Harvard College through the Laboratory for Translational Research at Harvard Medical School. CD59 is a new antibody-based monitoring test to identify the diabetic population at increased risk of developing vascular complications such as kidney disease, blindness, amputations, loss of nerve function, and cardiovascular disease, before irreparable organ damage has occurred. Use of such tests by diabetic patients will decrease morbidity and mortality by increasing their compliance with therapy(ies) and encouraging beneficial lifestyle changes. There is currently no such test on the market.

During 2006 our direct expenditures on our research and development projects were $2,221,000 for PT-401, $1,020,000 for CD-59, $325,000 for PT-500 s, $98,000 for Post-operative nausea and vomiting, $80,000 for Statinome and $13,000 for Ovanome. During 2006 and 2005, we spent a total of $$6.4 million and $2.1 million, respectively in research and development.

STRATEGIC ALLIANCES

Beth Israel Deaconess Medical Center License Agreement

Effective April 4, 2005, we entered into a license agreement with Beth Israel Deaconess Medical Center (Beth Israel), a Massachusetts nonprofit corporation, to develop a new, more potent and longer acting form of the anemia drug Erythropoietin, or EPO.

EPO is a glycoprotein naturally made by the body to stimulate red blood cell production. The currently marketed forms are manufactured using recombinant DNA technology and are used to treat anemia or low blood cell count. Under the agreement, Beth Israel has granted us an exclusive license to United States and foreign patents related to certain forms of EPO. We have the right to develop, use, market and sell products derived from the licensed patents.

In exchange for the license, we paid Beth Israel a $25,000 signing fee and agreed to make certain milestone payments linked to their progress in developing marketable products from the licensed technology. The total of payments, if all milestones are reached, is $2,150,000. The milestone payments are nonrefundable. Up to $200,000 of this amount is creditable against future royalties. In addition to the milestone payments, we must also pay Beth Israel an annual royalty of 4% of the net sales of all products developed from the licensed technology. A minimum royalty payment of $100,000 a year is due upon the commencement of commercial sales in any territory worldwide. Beth Israel has the right to terminate the agreement given thirty days notice of a default.

KBI BioPharma

During late March 2006, we entered into a services agreement with KBI BioPharma for the production development of our EPO product. The total estimated price is $2,840,000 of which $576,000 has been paid and approximately $817,000 has been accrued. KBI is not required to give us the results of their services until they have received payment from us. During the fourth quarter of 2006, these services were put on hold pending receiving additional funding.

Consulting Agreement with Dr. Arthur Sytkowski

Effective August 1, 2006, we entered into a one-year consulting agreement with Dr. Arthur Sytkowski, a Director of Beth Israel, to consult on the development of a new, more potent and longer acting form of EPO. Under the consulting agreement, Dr. Sytkowski has agreed to perform certain consulting services, including advising on medical, regulatory and patent issues, training personnel and providing assistance with EPO research and development. In exchange for the services, we will pay Dr. Sytkowski $10,000 a month for twelve months, five annual incentive payments of $25,000 each, and certain milestone payments of $125,000 linked to our progress under the Beth Israel license in developing marketable products from the licensed EPO technology. The total of all payments to Dr. Sytkowski under the agreement, assuming all milestones are reached, is $370,000. The milestone payments will be reduced - dollar for dollar - to the extent Dr. Sytkowski receives payments from Beth Israel relating to the same milestone events under the Beth Israel license. Either party can terminate this agreement upon ninety days written notice to the other; however, Dr. Sytkowski is still entitled to receive the milestone payments unless he is in violation of the agreement. On March 1, 2007, we entered into a letter agreement with Dr. Sytkowski whereby he agreed to accept shares of our common stock in lieu of payments due under the consulting agreement. At March 31, 2007, we had paid him $105,000 and had a remaining commitment of $265,000.

Collaborative Research Agreement with Beth Israel

Effective July 1, 2006, we entered into a one-year collaborative research agreement with Beth Israel Deaconess Medical Center. Under the terms of the agreement, Beth Israel is providing four researchers to us, for a period of one year to conduct certain research work related to our EPO research. The total cost per the amended agreement is $593,436. This agreement can be terminated in the event that either party is in default of a material obligation and fails to remedy such default within thirty days after receipt of written notice. At March 31, 2007, we had paid $173,906 and had a remaining commitment of approximately $420,000 remaining of which approximately $271,000 is accrued.

Consultant Agreement with Member of Our Scientific Advisory Board

During May 2005, we entered into a one-year agreement with our Scientific Advisory Board member, to continue collaboration with us to develop commercial tests for genetic ancestry and particular physical phenotypes. We have agreed to compensate this consultant with quarterly payments of $4,000 and 2,500 shares of our common stock. The term of this agreement is one year with automatic renewals each year unless either party provides written notice of its intent not to renew within thirty days prior to the annual anniversaries of this agreement. During May 2005, we also entered into a license agreement with this consultant. This license will remain in force in perpetuity as long as we are

not in default of the agreement. We agreed to pay the consultant 2.5% of the net revenues derived from a product and any subsequent versions of the products developed with his help.

License Agreement with Dr. Mark Froimowitz

On October 25, 2005, we entered into an exclusive licensing agreement with Dr. Mark Froimowitz to develop a series of compounds targeting the clinical development of enhanced pharmaceuticals for the treatment of drug addiction, attention deficit hyperactivity disorder, or ADHD, and depression. The licensed compounds are analogs of Ritalin, a well-known drug used for treatment of ADHD. The analogs are designed specifically to have a slow onset and increased half-life in the bloodstream, thus reducing a patient's required daily dosage and the potential for drug abuse. We have the exclusive right to develop, use, market and sell products derived from the licensed compounds. We are obligated to pay the licensor a 2% quarterly royalty fee on the net sales of products covered by the license. Minimum annual maintenance fees of $25,000 are required for the license term, but will be deducted from royalties. Additionally, the license requires progress payments of up to $275,000 upon the successful development and approval of licensed products. The license's initial five year term is supplemented by options capable of extending the license term for up to twenty years. At March 31, 2007, we had a remaining commitment of $400,000 of which $25,000 is accrued.

Research Sponsorship Agreement with Massachusetts College of Pharmacy and Health Sciences

In January 2006, we entered into a one-year research sponsorship agreement with the Massachusetts College of Pharmacy and Health Sciences, under which Dr. Mark Froimowitz will lead a research project that relates to the compounds that we license from him. The area of research is the synthesis and testing of monoamine transporter inhibitors as possible human medications for drug abuse, for attention deficit hyperactivity disorder, and for depression. The specific research covered by this agreement is the synthesis of quantities of compounds sufficient for animal testing, including developing methods for the resolution or chiral synthesis of compounds. We will pay a total of $300,000 to Massachusetts College of Pharmacy and Health Sciences for this research work which will be paid in monthly installments of $25,000 over one year. We will acquire all intellectual property associated with the research results. At March 31, 2007, we have paid $250,000 and have accrued the remaining $50,000 owed on this agreement. We anticipate renewing the contract with the Massachusetts College of Pharmacy and Dr. Froimowitz for 2007.

License Agreement with Harvard Medical School

On January 24, 2006, we entered into an exclusive license agreement with Harvard College through the Laboratory for Translational Research at Harvard Medical School. The Harvard license agreement provides for sponsored research and the clinical development and commercialization of a diagnostic test targeting early identification of the population at risk of developing vascular diabetic complications. The research will be conducted under the supervision of Dr. Jose Halperin. Either party has the right to terminate the agreement with ninety days written notice if the other party has a breach of their obligations and within 30 days of written notice upon any non-payment and the non-payments have not been cured . The sponsored research payments total approximately $2.5 million and will be paid in quarterly installments of approximately $208,333 over approximately three years. At March 31, 2007, we had paid $801,699 of these payments and accrued $269,329. We have been given notice of default by Harvard which stated that we must pay a substantial portion of the outstanding balance by the end of February 2007, or Harvard may exercise their right of termination of the agreement. We are currently operating under a schedule that requires us to pay them $100,000 per month.

Under the Harvard license agreement, we have the exclusive right to develop, market and sell products and services derived from the research. We must pay the Licensor a 6% royalty on the net sales of products and services covered by the License and 30% of all non-royalty sublicense income. We are also required to pay escalating minimum annual license maintenance fees totaling $850,000 through January 1, 2012. We are obligated to make annual license maintenance fees of $250,000 through the Harvard license term, but, beginning January 1, 2013, the annual license fee of $250,000 is credited against royalty payments. Additionally, we paid the Licensor previously incurred patent costs of approximately $100,000 upon the execution of the License, and are responsible for paying the costs associated with patent application, maintenance and prosecution during the License term.

INTELLECTUAL PROPERTY

Trademarks

We regard our trademarks, copyrights, domain names, trade dress, trade secrets, proprietary technologies, and similar intellectual property as important to our success, and we rely on trademark, and copyright law, trade-secret protection, and confidentiality and/or license agreements with our employees, customers, partners, and others to protect our proprietary rights. We have licensed in the past, and expect that we may license in the future, certain proprietary rights, technologies or copyrighted materials, from third parties, and we rely on those third parties to defend their proprietary rights, copyrights and technologies.

We have registered the trademark for DNAPrint and claim common law trademark rights to the marks DNAWitness, EuroDNA and AncestryByDNA.

Patent Applications

We have filed claims for international and domestic patent protection. The patents, if issued, will help ensure protection of our bioinformatics platforms, analytical software, genome maps and genetic classifiers in forensic, consumer products, and pharmacogenomics applications. The most significant patent applications cover the bioinformatics platforms and genome maps. Other applications describe the mathematical process of finding complex genetic information and the actual processes that find the gene variants responsible for specific complex genetic traits. Five of our patent applications, Compositions of Pigmentation Traits, Single Nucleotide Polymorphisms Predictive of Paclitaxel Responsiveness in Cancer Patients, Compositions Inferring Ancestry, Compositions Inferring Statin Response, and Compositions Inferring Eye Color, have entered National Phases and are pending review and we believe, approval in the U.S. and designated countries. The pigmentation patent is important because it includes the methods and compositions for determining skin shade, eye color or any other pigmentation application. Our Statin patent application includes the use of method for determining a person's ability to respond favorably to a particular statin drug, not the class as a whole. We may also obtain data to support our claim for all statins and the use of our ancestry information markers (AIMs) in the development of the assay. As discoveries warrant, we will continue to apply for future additional patents. Listed below are our current patent pending and granted applications.

NAME OF PATENT	Country	Patent #	Expiration Date	Product
Efficient Methods and Apparatus for High-Throughput Processing of Gene Sequence Data.	US US	US 7,110,885 (granted) PCT/US02/38326	9/19/2026	Ancestry
Methods for the Identification of Genetic Features for Complex Genetics Classifiers	US Canada Europe Japan Australia	US 7,107,155 (granted) CA 2,468,961 EP 02794095.6 JP549497/2003 AU2002359549	9/12/2026	Ancestry
Methods and Apparatus for use in Genetics Classification Including Classification Tree Analysis	US US Canada Europe Japan Australia	US10/496,226 PCT/USO2/38309 CA2,468,570 EP02789948.3 JP550120/2003 AU2002352985		Ancestry
Methods and Apparatus for use in Complex Genetics Classification Based on Correspondence Analysis and Linear-Quadratic Analysis	US US Canada Europe Japan Australia	US10/495,962 PCT/US02/41465 CA2,468,601 EP02797501.0 JP549549/2003 AU2002361871		Ancestry
Composition and Methods for the Inference Of Pigmentation Traits	US US Australia Canada Europe Hong Kong Japan	US11/397,454 PCT/US02/16789 AU2002/312112 CA2,448,569 EP02739467.5 hk04109585.8 JP2003/500216		Ancestry

Compositions and Methods for Inferring A Response to a Statin	US	US10/188,359	Statinome
	US	PCT/US02/20847	
	Australia	AU2002/316485	
	Canada	CA2,486,789	
	Europe	EP02746794.3	
	Japan	JP2003/509083	
Single Nucleotide Polymorphisms and Combinations Thereof Predictive of Paclitaxel Responsiveness in Cancer Patients	US	PCT/US02/38345	CD-59
	Australia	AU2002360452	
	Canada	CA2,468,312	
	Europe	EP02795709.1	
	Hong Kong	HK05102575.4	
	Japan	JP2003-546736	
	US	US10/496,605	

NAME OF PATENT	Country	Patent #	Expiration Date	Product
Compositions and Methods for Inferring Ancestry	US	US10/644,594		Ancestry
	US	PCT/US03/26229		
	Australia	AU2003265572		
	Canada	CA2,496,155		
	Europe	EP03788685.0		
	Japan	JP2005-502072		
Methylphenidate Analogs and Methods of Use Thereof	US	US11/256063		Ancestry
	US	PCT/US2005/038030		
Methods, Products and Treatments for Diabetes	US	US 6,835,545 (Granted)	4/16/2021	CD 59
	US	US10/870,342		
Anti-Glycated CD59 Antibodies and Uses Thereof	US	US2004/019392		CD 59
Multiplex Assays for Inferring Ancestry	US	11/357,729		Ancestry
	US	US06/05863		
Compositions and Methods for Inferring an Adverse Effect in Response to a Drug	US	601627,453		Ancestry
	US	US05/41326		
Methods and Compositions for Inferring Eye Color	US	US10/589,291		Retinome
	US	PCTUS05/04513		
	Europe	EP05723003.9		
Recombinant Human Erythropoietin with Altered Biological Activity	US	US 5,614,184 (Granted)	3/25/2017	PT-401
	US	US 6,489,293 B1 (Granted)	12/3/2022	

Production and Use of Recombinant Protein	US	US 6,242,570 (Granted)	6/5/2021	PT-401
Multimers with Increased Biological Activity	US	US 6,187,564 (Granted)	2/13/2021	
	US	PCT/US98/13944		
	Australia	AU PCT 732857 (Granted)	3/13/2021	
	Canada	CA PCT 2,296,071		
	Japan	JP PCT 2000-502204		
	Europe	EPO PCT 98 93 4269.6		
Polymorphisms of the OCTN1 cation transporters associated with inflammatory bowel disorders	US	US 20060105381		IBD

NAME OF PATENT	Country	Patent #	Expiration Date	Product
Modified Polypeptides with Increased Biological Activity	US	US 5,580,853 (Granted)	12/3/2016	PT401
	US	US 5,747,445 (Granted)	5/5/2018	
	US	PCT/US97/22503		
	Japan	JP PCT 10524930		
	US	US 5,919,758 (Granted)	7/6/2019	
	US	US 6,107,272 (Granted)	8/22/2020	
	US	PCT/US95/03242		
	Europe	EPO 0 751 959 (Granted)	5/1/2020	
Integrated disease information system	US	US 6,108,635 (granted)	8/22/2020	Computational Biology
Hierarchical Biological Modeling System and Method as Restricted to three of five original claims upon re-examination At the USPTO in 2001	US	US 5,808,918 (granted)	9/15/2018	Computational Biology
DNA polymorphism associated with Crohn s Disease	US	PCT WO 01/042511		Cohn s Disease
	US	US 239403		
IBD candidate gene	US	US 60/362,700		IBD
	US	US 60/362,717		
	US	US 60/342,388		
	US	US 10/327,189		
	US	PCT/IB02/05560		
	Japan	JP 2003-554727		
	Europe	EU 02781695.8		
	Australia	AU 2002348745		

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COMPETITION

Numerous entities are attempting to identify genomic variation predictive of specific diseases and drug response and to develop products and services based on these discoveries. We face competition in these areas from pharmaceutical, biotechnology and diagnostic companies, academic and research institutions and government and other publicly-funded agencies, both in the United States and abroad, most of which have substantially greater capital resources, research and development staffs, facilities, manufacturing and marketing experience, distribution channels and human resources than do we. Our key competitors include, but are not limited to, PPGx, Inc., a leading international developer and supplier of research-based pharmacogenomics services and products which recently announced the launch of its GeneTrials™ Bioinformatics Platform. Also, large pharmaceutical companies have their own internal research and development efforts that could surpass or eliminate our technology from the market.

These competitors may discover, characterize or develop important technologies applying genomics before us or may develop proprietary products and services that are more effective than those technologies that we develop. Additionally, these competitors may obtain regulatory approvals for their drugs and diagnostics more rapidly than we or our customers do, any of which could limit our ability to market effectively our products and services. If our patent applications are not awarded or if our competitors in the field of genetic research develop and receive approval of patents that supersede our applications, we could be forced to cease the development of our products, services and technologies. Some companies and governments are marketing or developing databases and informatics tools to assist participants in the healthcare industry and academic researchers in the management and analysis of genomic data. "Informatics tools" is a term used by scientists to describe software, computer programs or mathematical programs that analyze data sets or collected information that is stored in data files. Such computer programs can take an apparently meaningless block of numbers from a laboratory experiment and evaluate trends, look for statistical relationships and group or segregate the numbers according to their levels of importance to the scientist. They are tools to evaluate information. Our competitors have developed or plan to develop databases containing gene sequence, genomic variation or other genomic information and are marketing or plan to market their data to pharmaceutical and biotechnology companies or plan to make freely available their databases. These entities include, but are not limited to:

- Genaissance Pharmaceuticals: a provider of pharmacogenomic support services, including high-throughput sequencing, this company was recently acquired by another company called Clinical Data, Inc.

- Evolutionary Bioinformatics: Bioinformatics and genomics consulting, specializing in comparative genomics, functional genomics and model organisms.

- deCODE Genetics: Advanced bioinformatics and high-throughput genotyping facility.

- Celera Genomics: Drug discovery systems and services.

- Cellular Genomics: A biotechnology company focused on the discovery and validation of novel drug targets.

- Correlogic Systems: Developing tools and processes for proteomic and genomic-based clinical diagnostic systems and new drug discovery.

- Epoch Biosciences: Technologies useful in genetic research, diagnostics, drug development, infectious disease detection, prenatal testing and population screening to assess risk of disease or to predict response to drugs.

- Eragen Biosciences: Designs, develops, and markets functional genomic and drug/diagnostic discovery platform products, and technologies to the pharmaceutical, biotechnology and agro-biology industries.

In addition, numerous pharmaceutical and biotechnology companies, either alone or in collaboration with our competitors, are developing genomic research programs that involve the use of information that can be found in these databases.

Genomic technologies have undergone, and are expected to continue to undergo, rapid and significant change. Our future success will depend in large part on maintaining a competitive position in the genomics field. Others may rapidly develop new technologies that may result in our tests or technologies becoming obsolete before we recover the expenses that we incur in connection with the development of these products. Our developed proprietary products and services could become obsolete if our competitors offer less expensive or more effective drug discovery and development technologies, including technologies that may be unrelated to genomics.

We also compete in the forensic DNA testing market, consumer DNA products market and contract services outsourcing market. We have introduced new products and improved our flagship product, AncestryByDNA™, part of the consumer DNA market, by upgrading it from 76 marker sets to 175 marker sets. Additionally, we have increased our ability to include DNA sampling from Northern European, Middle Eastern, Southeastern European and South Asian by introducing EuroDNA™ 1.0.

In the consumer market, which is mainly supported by genealogy enthusiasts, we remain concerned that our potential reward from developing products will be limited by a sudden lack of interest. Our competitors include companies like:

- Sorenson Genomics, LLC: One of the larger suppliers of paternity and ancestry testing.

- DNA Testing Center, Inc.: A testing service for mitochondrial, paternity and Y chromosome testing for the consumer market and forensics market as well. Either of these firms or other companies could create a product that is competitive to our products, and reduce our current sales volumes.

Similarly, we have competitors in the field of forensics that includes the following companies and agencies:

- Orchid: The original inventor of Single Nucleotide Polymorphism analysis machines and SNP technologies through its Orchid Cellmark division is considered one of the premier independent DNA testing laboratories in forensics. This competitor not only has the scientific background but the financial means and expertise to create a product that directly competes with ours in the forensics market.

- FSS: A United Kingdom-based firm that processes nearly 85% of the UK's criminal DNA samples also has the ability to create a product that is competitive to our products and is exploring entering the U.S. market.

- Bode Systems, A division of Choicepoint: A significant competitor that, like FSS and Orchid has the ability to create and market a similar product to ours and eliminate us from the forensics market.

- FBI, Quantico Laboratories: The Federal Bureau of Investigation, or FBI, has significant development resources, and we believe they are contracting with Orchid and others to develop identity tests that will help them identify potential DNA donors from crime scene DNA. The bureau also invests federal research money on its own research to develop testing processes and procedures that it would approve for law enforcement.

- The National Institutes of Justice regularly provides grants to local and state police crime laboratories and University researchers that are competitive to our technology. We have applied for two grants and will continue to apply but have been rejected. In each application, despite the rejection, we have developed the proposed technology and brought it to the forensics market.

Forensic DNA and consumer DNA technologies have undergone, and are expected to continue to undergo, rapid and significant change. Our future success will depend in large part on maintaining a competitive position in these fields. Others may rapidly develop new technologies that may result in our tests or technologies becoming obsolete before we recover the expenses that we incur in connection with the development of these products. Our products and services could become obsolete if our competitors offer less expensive or more effective discovery and development technologies, including technologies that may be unrelated to genomics.

EMPLOYEES

As of April 30, 2007, we had twenty-four full-time employees and one part-time employee. None of our employees are represented by a labor union. We consider our relations with our employees to be good. We plan to add additional staff as needed to handle all phases of our business.

REPORTS TO SECURITY HOLDERS AND FILINGS WITH THE SEC

We are required to deliver an annual report to security holders and have mailed those reports to the shareholders for our annual meeting which will be held on June 25, 2007. We file quarterly, annual, proxy and other reports required with the Securities and Exchange Commission (SEC). You may read and copy any materials we file with the SEC at the SEC s Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330 or you may go to www.sec.gov and review our reports at an internet site the SEC maintains that contains reports, proxy and information statements and other information regarding our filings with the SEC. You may also view these reports at our website at www.dnaprint.com.

MANAGEMENT'S DISCUSSION AND ANALYSIS

CRITICAL ACCOUNTING POLICIES AND RESULTS OF OPERATIONS

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that have a significant impact on the results we report in our financial statements. Some of our accounting policies require us to make difficult and subjective judgments, often as a result of the need to make estimates of matters that are inherently uncertain. Actual results may differ from these estimates under different assumptions or conditions. Below, we discuss this further, as well as the estimates and judgments involved.

Asset Impairment

We review our long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset exceeds its fair value and may not be recoverable. In performing the review for recoverability, we estimate the future cash flows expected to result from the use of the asset and its eventual disposition. If the sum of the expected future cash flows, undiscounted and without interest charges, is less than the carrying amount of the asset, an impairment loss is recognized. Otherwise, an impairment loss is not recognized. Management estimates the fair value and the estimated future cash flows expected. Any changes in these estimates could impact whether there was impairment and the amount of the impairment. Since we are in the development stage, we do not have much history to determine our estimated cash flows. If we do not meet our targeted cash flows for our services and if the estimated disposition of the equipment is lower, this could result in a write-down of our equipment. Our equipment is very specialized equipment related to genomics research, and there probably will not be a large demand for our used equipment. The amount of our net fixed assets is the amount of the maximum risk if our assumptions were not correct. Each year the assets will have higher depreciation and the maximum risk will decrease correspondingly.

Allocation of Research and Development Costs

We allocate costs by identifying and directly expensing certain costs related to research and development and allocating certain other costs based on total labor effort that is estimated by management and employees. With some of these costs, a percentage of a total purchase order price is allocated to research and development. We base the labor time on time cards submitted each pay period by the employees. We record inventory for our raw materials. As raw materials are used, they are charged to research and development expense based upon actual usage for research and development. We continue to refine our process of identifying time associated with research and development. These refinements to estimates could increase or decrease our income statement expense categories of research and development, cost of sales and selling, general and administrative expenses. As we hire employees, the department in which the employee is hired will have a direct impact on the allocation of administrative costs to research and development. For example if a person is hired in research and development, the allocation to research and development for other administrative costs will increase because labor effort percentage for research and development will have increased. If a person is hired in administration, the allocation to research and development for other administrative costs will decrease because the labor effort percentage for research and development will have decreased. Changes to these estimates could have a significant impact on the accrual and related compensation

expense and/or deferred compensation.

Estimation of Fair Market Value

We use the Black Scholes Pricing Model to determine fair market value in certain instances, for example, to value warrants and the intrinsic value of the convertible debt and non-detachable warrants. The Black Scholes Pricing Model requires estimated assumptions in its computation. We estimate the assumptions used in each calculation based upon the transaction term and what we believe most appropriately reflects the transaction. If different estimates of the assumptions were used, it could result in different fair market value amounts being calculated. Additionally, various methods can be used to determine the fair market value of the warrant. If a different model were used besides the Black Scholes Pricing Model, it could result in different fair market value amounts being calculated.

Derivatives

We have reviewed our contracts and financial instruments to determine what derivatives and embedded derivatives we may have. We have then reviewed these derivatives and embedded derivatives to determine if they should be recorded as equity or a derivative liability valued at fair value. Judgment is used to apply the criteria of Statement of Financial Accounting Standards No. 133 and No. 155 and Emerging Issues Task Force 00-19 to the derivatives. Also judgment and estimates are required to determine the fair value of the derivative liabilities and the fair market value of the financial instrument as a whole. Although we believe that the estimates and assumptions used are reasonable, actual results may differ from these estimates under different assumptions or conditions.

Estimate of Accrued Default Penalties

We have recorded an amount of accrued default penalties related to our default of the Dutchess notes and have estimated it based upon 30% of the face amount of the outstanding debt. We apply the debt payments on the notes based upon the payments paying off the oldest notes first. If we applied the payments from the puts in a different method, it could result in a different estimate. Also, since Dutchess has not notified us of any penalties owed, we could have estimated the amount as low as -0-. Although we believe that the methods and estimates we used are reasonable, actual results may differ from these estimates.

The following discussion and analysis should be read in conjunction with the balance sheet as of December 31, 2006 and the financial statements as of and for the years ended December 31, 2006 and 2005 included with this Form 10-KSB.

SUMMARY

Although we have been in existence for a number of years, we continue to be a development company while we develop products for introduction to the pharmacogenomics market. We continue to devote substantially all of our efforts to initiating and developing our planned principal operations in our pharmacogenomics products. We generate revenues in our consumer, forensic and genotyping services, but these services have not yet resulted in the generation of significant revenues. Our revenue for 2006 has increased over 2005 mainly due to an increase in sales of our ancestry product, AncestryByDNA(TM) and genotyping services. The increase in genotyping is the result of our acquisition of Ellipsis assets late in 2005. Our consumer revenues increased as a result of the revenue contribution from Trace Genetics which we acquired during mid-2005 and sales generated from increased advertising and other publicity, including news stories and television shows. Our pharmacogenomics products are still in development. Because our products are relatively new to the market, we believe that sales will continue to fluctuate from period to period until we can better determine through continued market research and experience how and where to best market and sell the products.

In our pharmacogenomics area, we have established a strategic alliance with Beth Israel Deaconess Medical Center (Beth Israel) to develop a new, more potent and longer acting form of the anemia drug Erythropoietin, or EPO. EPO is a glycoprotein naturally made by the body to stimulate red blood cell production; the currently marketed forms are

manufactured using recombinant DNA technology and are used to treat anemia or low blood cell count. Under the agreement, Beth Israel has granted us an exclusive license to United States and foreign patents related to certain forms of EPO. We have the right to develop, use, market and sell products derived from the licensed patents. We have also entered into a consulting agreement with Dr. Arthur Sytkowski, the Director of Beth Israel, to consult on the EPO project. Dr. Sytkowski has agreed to perform certain consulting services, including advising on medical, regulatory and patent issues, training personnel and providing assistance with EPO research and development. During July 2006, we entered into a collaborative research agreement with Beth Israel to provide four researchers to us to conduct certain research work related to our EPO research.

During late March 2006, we entered into a services agreement with KBI BioPharma for the production development of EPO. During the fourth quarter of 2006, these services were put on hold pending receiving additional funding to fund them.

We entered into an exclusive licensing agreement with Dr. Mark Froimowitz to develop a series of compounds targeting the clinical development of enhanced pharmaceuticals for the treatment of drug addiction, attention deficit hyperactivity disorder, or ADHD, and depression. The licensed compounds are analogs of Ritalin, a well-known drug used for treatment of ADHD. The analogs are designed specifically to have a slow onset and increased half-life in the bloodstream, thus reducing a patient s required daily dosage and the potential for drug abuse. We have the exclusive right to develop, use, market and sell products derived from the licensed compounds.

We entered into a research sponsorship agreement with the Massachusetts College of Pharmacy and Health Sciences, under which Dr. Mark Froimowitz will lead at the Massachusetts College of Pharmacy and Health Sciences a research project that relates to the compounds that we license from him. The area of research is the synthesis and testing of monoamine transporter inhibitors as possible human medications for drug abuse, for ADHD, and for depression. The specific research covered by this agreement is the synthesis of quantities of compounds sufficient for animal testing, including developing methods for the resolution or chiral synthesis of compounds.

We entered into an exclusive license agreement with Harvard College through the Laboratory for Translational Research at Harvard Medical School. The Harvard license agreement provides for sponsored research and the clinical development and commercialization of a diagnostic test targeting early identification of the population at risk of developing vascular diabetic complications. The research will be conducted under the supervision of Dr. Jose Halperin. Under the Harvard license agreement, we have the exclusive right to develop market and sell products and services derived from the research. We have been given notice of default by Harvard which stated that we must pay a substantial portion of the outstanding balance by the end of February 2006, or Harvard may exercise their right of termination of the agreement. We are currently operating under a schedule that requires us to pay Harvard $100,000 per month. At March 31, 2007 we owed them $269,329.

We continue work on Ovanome, a Taxol screening diagnostic test, and Statinome, a test for the cardiac drug market, which are both currently under development. We will also continue our efforts on other research and development projects that are underway. Our OVANOME™ technology is under development with researchers at the Moffitt Cancer Center in Tampa, Florida. We are currently trying to acquire enough samples to perform our research for our Ovanome work.

We have an agreement with our Scientific Advisory Board member, to continue collaboration with us to develop commercial tests for genetic ancestry and particular physical phenotypes. We continue to work with him on upgrading our current ancestry products.

Our plan of operations for the ensuing twelve months includes efforts to: 1) increase sales of our existing products and services; 2) introduce new and expanded products and services in the consumer and forensic markets; 3) promote our genotyping and paternity services while continuing to concentrate on research and development for both our existing products and our anticipated pharmacogenomic products and services. We expect to add personnel in the laboratory and in administration, as growth warrants. Capital expenditures needed for the next twelve months are discussed below under the section entitled "Liquidity and Capital Resources".

Although we have been in existence for a number of years, management's efforts to develop our business have not yet resulted in significant revenues. We have chosen to focus on increasing sales volume in the consumer, forensic and genotyping markets while continuing to develop products for introduction to the pharmacogenomics market. We intend to support research and development as a vital component of our overall growth strategy. Until (i) potential customers are familiar with our technology and products, which will come from continued research and development and proven market use, and (ii) we introduce our pharmacogenomics products, it is unlikely that we will generate significant revenue.

The following discussion of our historical financial results should be read against this background.

RESULTS OF OPERATIONS

Year Ended December 31, 2006 Compared to Year Ended December 31, 2005

Sales and Cost of Sales

During the years ended December 31, 2006 and 2005, revenues were $2,433,000 and $1,275,503, respectively. A $1,157,497 increase in revenues for the year ended 2006 compared to 2005 is a 90.7% increase. In addition to the revenues recognized in the accompanying statement of operations, we also have recorded deferred revenues of $177,775 as of December 31, 2006. Deferred revenue is recorded when a prepaid or billed order has been received, but all the services have not been completed as of December 31, 2006. We believe the majority of the deferred revenue will be recognized as revenue in the first quarter of 2007.

The approximate increase of $1,157,000 in revenues for the year ended 2006 compared to 2005 is mainly the result of our genotyping revenue increasing by approximately $590,000, our AncestryByDNA™ revenues increasing by approximately $426,000, our MtDNA™ revenues increasing approximately $127,000, Y SNP revenues increasing approximately $65,000, EURO-DNA™ revenues increasing approximately $47,000 and forensics services revenues increasing approximately $8,000 compared to the same period in the prior year. These increases were offset by a decrease of approximately $101,000 from our paternity services. In addition, we had a decrease of approximately $5,000 of additional other revenues.

Genotyping sales were generated primarily through work with universities with three customers being our major clients of these services during 2006. The increase of genotyping services of approximately $590,000 during 2006 compared 2005 was the result of the revenue from our acquisition of Ellipsis during late 2005. During 2006, we recorded revenue of $311,742, $147,397 and $187,997 from three different genotyping customers. We do not have any agreements with these customers. We provide them services based when they provide us a request and a purchase order.

During 2006 compared to 2005, sales of our consumer services increased by approximately $665,000. This is due to increased awareness and interest in genealogy. We have been featured in several articles and television programs which have resulted in an increase in sales of our consumer products during this year. We currently contract with service providers who also sell our consumer products as well as advertise on the Internet and in paper-based publications, such as Google and Family Tree magazine, to grow sales of our consumer products. Our consistent sales come through our service providers. We will also continue to pursue adding service providers to increase our sales volume of our consumer products. One of our service providers, Sorenson Genomics, LLC accounted for approximately $514,000 of sales during 2006. We have a basic service provider agreement with them that can be terminated at any time.

Our forensic sales increased by $8,000 during 2006 compared to 2005. We continue to market our forensic services, but have focused our marketing efforts on our consumer products as the forensic sales are typically sold by referrals. During 2006, we attended several forensic conferences, and we are planning on continuing this in 2007 to increase the awareness of our forensic products which we believe can be used to assist with the country s focus on homeland security.

Sales of our paternity services decreased by approximately $101,000 during 2006 compared to 2005. During 2005, we had one customer that accounted for the majority of our paternity revenue, and toward the end of 2005, this customer found an alternative source for this service. We do not expect our paternity services to be a large revenue generator for us in 2007 as we are focusing our marketing efforts on our consumer products.

While we continue to improve and refine our accounting systems, we currently do not segregate product costs by product or service. We have been and continue to be a development stage company as described in Financial Accounting Standards Board Statement No. 7. We continue to devote substantially all of our efforts to initiating and developing our planned principal operations. We expect that our pharmacogenomic products and services, once introduced, will be our major revenue generator.

During the years ended December 31, 2006 and 2005, cost of sales was $1,678,932 and $950,472, respectively. The 76.6% increase of $728,460; was mainly a result of increased revenues during the year ended December 31, 2006 compared to the same period in 2005. The gross profit as a percentage of revenue was 31.0% and 25.5% for the years ended December 31, 2006 and 2005, respectively. Because of our small sales volume, these results are not indicative of the margins that we expect to attain if our long-term goals are achieved. We anticipate that as we gain experience and can begin to take advantage of economies of scale benefits through increased revenues; our margins will stabilize and begin to track in line with other companies in similar industries. However, in the near term, while we continue to be a development stage enterprise, we expect that our margins will continue to fluctuate.

Research and Development Expenses

Our research and development costs consist of raw materials, laboratory supplies, equipment expense, facilities costs and employment-related costs. These research and development expenses were incurred in support of our currently available consumer and forensics products and genotyping services and for our anticipated pharmacogenomics products.

Research and development costs increased from $2,122,383 in 2005 to $6,427,115 in 2006, an increase of $4,304,732, or 202.8%. The increase of approximately $4,305,000 in research and development expense for the year ended December 31, 2006 compared to the same period in 2005 resulted primarily from $1,932,000 of costs invested in our EPO project, $325,000 invested in our ADHD project, $65,000 invested in our Statinome project, $1,092,000 invested in our diabetes project, $98,000 invested in post-operative nausea and vomiting project and $108,000 invested in research samples used to expand our current products, and increase of labor costs of $489,000. The remaining increase of $196,000 was the cost of increased research performed on our other current products and allocation of administrative costs.

Because we are in the development stage of our long-term business, it is not possible to directly correlate our current research and development costs to our future costs. Currently we do not manage on a project cost basis with respect to research and development. We are implementing revenue recognition and project status measures which will in the future disclose such information. Our revenue generation to date has not been substantial or steady enough to warrant segregation of time, costs and revenue. We are a development stage enterprise with new products that are not available through competitors for forensics and genealogy. For example, many of our products and services are in the development stage, and the segregation of each project by its particular cost, revenue and cash flow is currently not feasible.

We continue to support research and development to attain our long-term business strategy, and it will remain a high priority and a necessary resource to sustain future growth. We will continue to hire research and development personnel and invest in the infrastructure required to support future innovation, including equipment, supplies and other asset purchases.

Selling, General and Administrative Expenses

Another significant component of our operating expenses is selling, general and administrative expenses. These expenses resulted from (i) accounting and other fees associated with being a public company and other regulatory compliance activities, (ii) legal fees associated with our patent filings and maintenance and preparation of our securities law filings, (iii) selling and marketing costs to promote our products and (iv) administrative and other salaries and expenses.

During the years ended December 31, 2006 and 2005, selling, general and administrative expenses increased by $329,574 to $3,194,122 compared to $2,864,548 for the same period in the prior year. The 11.5% increase for 2006 compared to 2005 was primarily the result of increased advertising, marketing materials and investor relations costs of approximately $260,000; the remaining increase was mainly due to the administrative costs added from our Ellipsis and Trace Genetics acquisitions in mid-to-late 2005.

We are not able to extrapolate current general and administrative costs to our future costs. As our long-term business develops, we believe our selling, general and administrative costs will increase with revenue growth. For example, to increase sales, an increase in marketing and sales expenditures will be required to broaden and expand our market awareness and penetration. We expect all costs associated with normal marketing and sales activities to increase, including trade shows, advertising, promotion, and marketing and sales tools such as brochures and sales pamphlets. Over the long-term, as we become an established business, we anticipate that our costs will be comparable to other similar businesses of our size and type.

Interest Expense

During the year ended December 31, 2006, interest expense increased by $9,025 to $59,395 compared to $50,370 for the same period in the prior year. The 17.9% increase in interest expense for 2006 compared to 2005 is due mainly to higher interest on leases which was offset by a lower La Jolla convertible debenture balance during 2006 compared to 2005 as La Jolla exercised its conversion rights each month during 2005.

Debt Default Penalties

We are in default of each of the Dutchess Notes due to not making the minimum principal payments. Dutchess has the right to charge us liquidated damages of up to 30% of the face amount of these notes. Dutchess has not exercised this right at December 31, 2006 nor at the time this report was issued. At December 31, 2006, we had accrued $2,143,500 for these potential liquidated damages. This is an estimate based upon the maximum amount that Dutchess could charge us, and this estimate may change with time.

Intrinsic Value of Convertible Debt and Non-detachable Warrants and Debt Discount Amortization

We recorded interest expense of $2,581,269 and $1,953,084 pertaining to the intrinsic value of convertible debt and non-detachable warrants and debt discount amortization during 2006 and 2005, respectively. We expect this expense to continue through mid-2007 as we have funded our operating cash flows through notes payable with Dutchess.

Interest Income

During 2005, we recorded $15,974 of interest income on a loan to Biofrontera, a German company. This loan was paid off during 2005. During 2006, we recorded $211 of interest income.

Amortization of Deferred Financing Fees

During 2006, we expensed $238,638 of deferred financing fees related to the La Jolla debenture and Dutchess notes. This is compared to $333,255 expensed during 2005. We expect this expense to continue through mid-2007 as we have funded our operating cash flows through notes payable with Dutchess.

Gain (Loss) on Derivative Contracts, Net

During 2006, we reduced our derivative liability account by and recorded a gain on derivative liabilities of $1,092,015 related to the June 2005 and August 2005 Dutchess notes payable transactions as they were paid in full.

During 2006, we recorded a gain on derivative liabilities $230,760, respectively related to recording the warrants at fair value during this reporting period.

During the first quarter of 2006, we converted all of our remaining preferred stock outstanding to common stock at a fair market value of $235,366 and reduced our derivative liabilities by $189,042 which resulted in us recording a loss on derivative liabilities of $46,324.

During 2005, we recorded a loss of $2,229,283 related to the initial recording of certain Dutchess notes and this was offset by recording a net gain of $618,378 for various derivatives at fair value during this nine month period.

Gain on Sale of Investments Available-For-Sale

During late December 2006, we sold 32,000 shares of Biofrontera stock for a realized gain of $394,773. We expect to record a realized gain relating to the remaining shares we own of Biofrontera stock during 2007.

Settlement Expense

On September 13, 2006, we settled litigation with Lonnie Bookbinder who had claimed additional compensation from us. In the settlement agreement, we agreed to issue 1.5 million shares of our common stock and pay $115,000 of cash to him. We recorded a settlement expense of $133,000 during the third quarter of 2006. Through February 2007, Lonnie Bookbinder was paid $90,000 of cash and was issued 4.2 million shares of stock in accordance with an amended settlement agreement.

Foreign Currency Gain (Loss)

During 2005, we recorded a foreign currency loss of $7,060 on a loan we made in Euros. This loan was paid off during 2005. During 2006, we had a foreign currency gain of $3,172, related mainly to some transactions at our Canadian subsidiary and a loan receivable in euros that was paid off during 2006.

Other Expense

During 2005, we incurred $115,252 for costs related to a potential acquisition of Biofrontera that was not completed.

RESULTS OF OPERATION

Three months ended March 31, 2007 compared to the three months ended March 31, 2006

Revenues and Cost of Sales

During the three months ended March 31, 2007 and 2006, revenues were $701,013 and $678,399, respectively. A $22,614 increase in revenues for the first quarter of 2007 compared to the same quarter from the prior period is a 3% increase. In addition to the revenues recognized in the accompanying statement of operations, we also have recorded deferred revenues of $157,301 as of March 31, 2007. Deferred revenue is recorded when a prepaid or billed order has been received, but all the services have not been completed as of March 31, 2007. The majority of the deferred revenue will be recognized as revenue during 2007.

The increase of $22,614 in revenues for the three months ended March 31, 2007 compared to the same period in the prior year is mainly the result of our EuroDNA™ revenues increasing by $58,222, our Ancient DNA revenues increasing $51,725 our MtDNA™ revenues increasing $18,956, Y SNP revenues increasing $4,023, and forensics revenue increasing $1,200. These increases were offset by a decrease of genotyping services revenues of $92,071 and AncestryByDNA 2.5 revenues decreasing by $11,879 and lower other income of $7,562 compared to the same period in the prior year.

Genotyping sales were generated primarily through one customer during 2007. The decrease of genotyping services of $92,071 during the first quarter of 2007 compared to the same period in 2006 was the result a large project completed during the first quarter of 2006. One of our customers accounted for 27% of our total revenue during the first quarter of 2007.

During the three months ended March 31, 2007 compared to the same period in 2006, sales of our consumer services increased by $121,047. This is due to a large project from our Ancient DNA division and increased awareness and interest in genealogy. We have been featured in several articles and television spots which has resulted in an increase in sales of our consumer products during this period. We currently contract with service providers who also sell our consumer products as well as advertise on the Internet and in paper-based publications (i.e. through Google and Family Tree magazine) to grow sales of our consumer products. Our consistent sales come through our service providers. We will also continue to pursue adding service providers to increase our sales volume of our consumer products. One of our service providers accounted for 23% of our total revenue during the first three months of 2007.

During the three months ended March 31, 2007 compared to the same period in 2006, sales of our forensic services increased by $1,200. We continue to market our forensic services that we have to offer, but have focused our marketing efforts on our consumer products as the forensic sales are typically sold by referrals.

While we continue to improve and refine our accounting systems, we currently do not segregate product costs by product or service. We have been and continue to be a development stage company as described in Financial Accounting Standards Board Statement No. 7. We continue to devote substantially all of our efforts to initiating and developing our planned principal operations. We expect that our pharmacogenomic products and services, once introduced, will be our major revenue generator.

During the three months ended March 31, 2007 compared to the same period in 2006, cost of sales decreased by $18,479. The cost of sales as a percentage of revenue was 73% and 79% for the three months ended March 31, 2007 and 2006, respectively. Because of our small sales volume, these results are not indicative of the margins that we expect to attain if our long-term goals are achieved. We anticipate that as we gain experience and can begin to take advantage of economies of scale benefits through increased revenues; our margins will stabilize and begin to track in line with other companies in similar industries. However, in the near term, while we continue to be a development stage enterprise, we expect that our margins will continue to fluctuate.

Research and Development Expenses

During the three months ended March 31, 2007 compared to the same period in the prior year research and development (R&D) expenses decreased $838,682. The decrease of $838,682 in R&D during the first quarter of 2007 compared to the same quarter in the prior year resulted primarily from approximately $495,000 of lower costs invested in our EPO project, approximately $116,000 of lower costs invested in our diabetes project, approximately $22,000 of lower costs invested in post operative nausea and vomiting project, $107,000 of lower costs invested in samples and approximately $99,000 of lower costs invested in direct materials.

Because we are in the development stage of our long-term business, it is not possible to directly correlate our current research and development costs to our future costs. Currently we do not manage on a project cost basis with respect to research and development. We are implementing revenue recognition and project status measures which will in the future disclose such information. Our revenue generation to date has not been substantial or steady enough to warrant segregation of time, costs and revenue. We are a development stage enterprise with new products that are not available through competitors for forensics and genealogy. For example, many of our products and services are in the development stage, and the segregation of each project by its particular cost, revenue and cash flow is currently not feasible.

We continue to support research and development to attain our long-term business strategy, and it will remain a high priority and a necessary resource to sustain future growth. We will continue to hire research and development personnel and invest in the infrastructure required to support future innovation, including equipment, supplies and other asset purchases.

Selling, General and Administrative Expenses

Another significant component of our operating expenses is selling, general and administrative expenses. These expenses resulted from (i) accounting and other fees associated with being a public company and other regulatory compliance activities, (ii) legal fees associated with our patent filings and maintenance and preparation of our securities law filings, (iii) selling and marketing costs to promote our products and (iv) administrative and other salaries and expenses.

Selling, general and administrative expenses decreased $261,195 for the first quarter of 2007 compared to the first quarter of 2006. The selling, general and administrative expenses decrease of $261,195 was primarily the result of decreased advertising, marketing materials and investor relations costs of approximately $99,000 and reduced legal expenses of approximately $86,000. The remaining decrease of approximately $76,000 is mainly due reduced administrative costs.

Interest Expense

During the three months ended March 31, 2007, we recognized an increase of $13,811 of interest expense compared to the same period in the prior year. The increase in interest expense is due mainly to a loan payable that was not outstanding during first quarter 2006 but was outstanding during for part of first quarter 2007.

Debt Default Penalties

We are in default of each of the Dutchess Notes due to not making the minimum principal payments. The Dutchess documents purport to give Dutchess the right to charge us liquidated damages of up to 30% of the face amount of these notes. Dutchess has not exercised this right at March 31, 2007 nor at the time this report was issued. At March 31, 2007, we had accrued $1,729,500 for these potential liquidated damages which was $414,000 lower than the accrual at December 31, 2006 as we had paid off the December 2005 Dutchess note. This is an estimate based upon 30% of the face value of remaining unpaid Dutchess notes and this estimate may change with time.

Intrinsic Value of Convertible Debt and Non-detachable Warrants and Debt Discount Amortization

We recorded interest expense of $391,381 and $1,070,779 pertaining to the intrinsic value of convertible debt and non-detachable warrants and debt discount amortization during the three months ended March 31, 2007 and 2006, respectively. We expect this expense to continue during 2007 at a lower rate than compared to 2006 as we amortize the debt discount on our notes payable.

Amortization of Deferred Financing Fees

During the three months ended March 31, 2007 and 2006, we expensed $39,992 and $75,176, respectively of deferred financing fees related to the La Jolla debenture and Dutchess notes. We expect this expense to continue during 2007 as we have funded our operating cash flows through notes payable with Dutchess.

Gain (loss) on Derivative Contracts, Net

During the three months ended March 31, 2007 and 2006, we recorded a loss on derivative liabilities of $31,981 and $71,567, respectively related to recording the warrants at fair value during these periods.

During the three months ended March 31, 2006, we reduced our derivative liability account by and recorded a gain on derivative liabilities of $1,092,015 related to the June 2005 and August 2005 Dutchess notes payable transactions as they were paid in full.

During the three months ended March 31, 2006, we converted all of our remaining preferred stock outstanding to common stock at a fair market value of $235,366 and reduced our derivative liabilities by $189,042 which resulted in

us recording a loss on derivative liabilities of $46,324.

Gain on Sale of Investments Available-For-Sale

During the first quarter of 2007 we recorded a gain of $4,370,780 related to the sale of the remaining shares of our investment in Biofrontera. During January 2007, we sold 50,000 shares of Biofrontera stock for proceeds of $644,000. On February 15, 2007, we sold the remaining 373,324 shares of Biofrontera stock which were recorded as marketable equity securities available-for-sale on the Consolidated Balance Sheet. These shares were sold for a total of 4,443,240 euros (approximately $5.9 million USD). We have received 1,000,000 euros at March 31, 2007 and the remaining balance is expected to be paid 500,000 euros per month from April 2007 through September 2007 with the remaining 443,240 euros expected to be paid during October 2007. We have a right to buy back these Biofrontera shares on or prior to October 31, 2007 at a price of 16.13 euros per share. If we elect the option to buy back the shares, the purchase price would be placed into an escrow account and the other party would have until March 31, 2008 to deliver the shares. These shares would then have a lock-up and couldn t be sold until after October 31, 2008.

Foreign Currency Gain (Loss)

During the three months ended March 31, 2007 and 2006, we recorded a foreign currency gain of $38,087 and $81, respectively. The foreign currency amounts are related mainly to some transactions at our Canadian subsidiary and some note payable transactions that were in a foreign currency.

LIQUIDITY AND CAPITAL RESOURCES

General

During 2006, our operating requirements generated negative cash flow from operations as we continued to engage in testing and development of our products. Our cash used by operating activities during 2006 was $5,781,789. We also had principal payments on capital lease obligations of approximately $197,000 and purchases of laboratory equipment and computers of approximately $391,000. The resulting cash shortfall was financed primarily through proceeds from notes payable of $4,539,024, net of costs and proceeds of approximately $555,000 from sale of Biofrontera shares. We also borrowed $50,000 on our line of credit and received a short-term loan of $126,880 which was paid back during 2006. The repayment of notes of $3,018,851 was financed by the Dutchess puts which resulted in proceeds from common stock of $3,033,802, net of stock issuance costs.

During the first quarter of 2007, our operating requirements generated negative cash flow from operations as we continued to engage in testing and development of our products. Our cash used by operating activities for the first quarter of 2007 was $1,246,634. We also had principal payments on capital lease obligations of $66,816 and purchases of computer equipment of $2,000. The resulting cash shortfall was financed primarily through the sale of the Biofrontera investment which provided proceeds of $1,950,883. We paid back $1,568,148 of notes payable which was financed by the sale of the Biofrontera shares and by the Dutchess puts. The proceeds from common stock of $606,567, net of stock issuance costs resulted from the Dutchess puts and La Jolla exercise of some of their warrants.

Based upon our current plans, we will continue to focus on increasing market awareness of our products and developing sales for our currently available consumer products and genotyping services.

Although consumer products and genotyping services are cornerstones of our technology, our single largest opportunity remains applying our technology for the benefit of patients. Management has developed and has begun to implement a global strategy for our growth and development in the pharmaceutical market. Our strategy is to partner certain specialized tasks rather than create them internally. Developing a pharmaceutical product is a long, complex and diverse mission. It requires a multitude of diverse scientific expertise and technologies. This is complicated further by recent FDA promulgations that we believe will compel the pharmaceutical industry to develop genetic specific drugs that are more efficacious.

As discussed in the commitments section below, we will continue to have increased research and development costs during 2007 and beyond. See the discussion in the commitments section for the specifics of these costs and discussions of our current strategic alliances.

FINANCINGS

La Jolla Cove Convertible Debenture and Warrants

On November 25, 2003, we closed on a $500,000, 8% convertible debenture with non-detachable warrants with La Jolla Cove Investors, Inc. We pay interest on a monthly basis with a principal balloon payment due on the extended maturity date of November 25, 2007. Per the agreement, La Jolla shall convert at least 5% of the face value of the debenture each calendar month into our common stock. The number of common stock shares into which this debenture may be converted is equal to the dollar amount of the debenture being converted multiplied by sixteen, minus the product of the conversion price multiplied by fifteen times the dollar amount of the debenture being converted, and the entire foregoing result shall be divided by the conversion price. The conversion price is equal to the lesser of (i) $0.20 or (ii) 80% of the average of the five lowest daily value weighted average price of our common stock during the twenty trading days prior to La Jolla s election to convert. We have the right to reject a conversion if the stock price is below $0.50 per share. If we exercise this right, we then are obligated to pay the portion of the debenture the conversion notice was for plus applicable unpaid accrued interest and a premium equal to 10% of those amounts.

The non-detachable warrants must be exercised concurrently with the conversion of debt to common stock by La Jolla. La Jolla has the right to exercise warrants equaling fifteen times the dollar amount of the debenture being converted at an exercise price of $1.00. If La Jolla does not convert at least 5% of the warrants per month, then La Jolla will not be able to collect interest on the debenture for that month. The warrants issued to La Jolla expire on November 25, 2007.

On February 18, 2004, the convertible debenture and Warrant to Purchase Common Stock agreements were amended. If La Jolla does not convert at least 5% of the face value of the debenture and exercise at least 5% of the warrants in any particular calendar month, La Jolla may wire to us $375,000 less the dollar amount of warrants exercised in that month within five business days of the end of the month. Should La Jolla fail to wire us such funds, La Jolla shall not be entitled to collect interest on the debenture for that month. If breached more than once, then we may terminate the agreements with La Jolla and the debenture becomes due six months thereafter with accrued interest. For any month the minimum payment was required to be paid and was not paid, we agreed for them to not fund the payment.

On June 28, 2005, La Jolla exercised its right to increase its note by $250,000 with the same terms as the previous convertible debenture except the annual interest rate is two percent. This convertible debenture has the same terms and conditions as the initial La Jolla note.

On October 20, 2005, we amended the La Jolla convertible debenture and the warrant granted to La Jolla to confirm that the warrant exercise price remained at $1 per share after the twenty-to-one reverse stock split, the maturity date of the debenture and the expiration date of the warrant was extended to November 25, 2007 and that when La Jolla exercised its option to add $250,000 in principal to the convertible debenture that we granted to La Jolla the right to purchase an additional 3,750,000 shares of our common stock under the warrant.

During 2006, La Jolla converted $7,368 of convertible debentures into our common stock and exercised non-detachable warrants to purchase 110,512 shares of our common stock. At March 31, 2007, we had $201,250 outstanding on this convertible debenture.

Dutchess Investment Agreement

Effective March 30, 2007, we entered into an Investment Agreement and a Registration Rights Agreement with Dutchess Private Equities Fund, Ltd. Pursuant to the Agreement, Dutchess committed to purchase our common stock up to an aggregate purchase price of $10 million over a five-year period. The Dutchess Agreement provides that, from time to time, we may deliver a notice to Dutchess. Such notices will state the dollar amount of common stock that we desire Dutchess to purchase subject to the limits in the Investment Agreement. Upon receipt of a put notice, Dutchess is obligated to purchase from us during the relevant pricing period shares having an aggregate purchase price equal to at our election, either: (A) Two hundred percent of the average daily volume (U.S. market only) of our common stock for the ten trading days prior to the applicable Put Notice Date, multiplied by the average of the three daily closing bid prices immediately preceding the Put Date, or (B) $600,000 times the average of the lowest closing bid prices of our common stock during the specified pricing period. Dutchess is obliged to purchase the dollar amount of common

stock set forth in the notice at a purchase price equal to 93% of the lowest closing bid price of the common stock during the five trading days after the notice.

The obligation of Dutchess to purchase under the Dutchess Agreement is contingent upon us having an effective registration statement registering the resale of the shares by Dutchess. In addition, we are not permitted to provide a notice, and Dutchess is not obliged to purchase any shares, in the event that we do not have sufficient authorized shares available for purchase to fulfill such commitment. This registration statement is registering shares in conjunction with this 2007 Dutchess agreement.

During 2006, we exercised put notices in accordance with our 2004 Dutchess agreement (this agreement expired in May 2007) and received $3,038,087 of cash proceeds ($3,033,802 cash proceeds net of cash offering costs) for which we issued 188,860,259 shares of our common stock to Dutchess. For the year ended 2006, proceeds totaling $3,018,851 from these puts were used to reduce the notes payable outstanding with Dutchess.

Dutchess Notes

In 2006, we funded our operations and research and development through the notes payable proceeds we received from Dutchess. On March 6, 2006, we issued to Dutchess a promissory note in the amount of $1,500,000 for a purchase price of $1,200,000. The note is due and payable in full on March 6, 2007. Other than the $300,000 discount inherent in the purchase price, the note is non-interest-bearing. The note will be repaid using the proceeds of each put notice delivered by us to Dutchess under the March 2007 Investment Agreement, proceeds from the sale of Biofrontera investment and other capital raised, if any.

On April 17, 2006, we issued to Dutchess a promissory note in the amount of $1,470,000 for a purchase price of $1,175,000. The note is due and payable in full on April 17, 2007. Other than the $295,000 discount inherent in the purchase price, the note is non-interest-bearing. The note will be repaid using the proceeds of each put notice delivered by us to Dutchess under the March 2007 Investment Agreement, proceeds from the sale of Biofrontera investment and other capital raised, if any.

On May 18, 2006, we issued to Dutchess a promissory note in the amount of $1,300,000 for a purchase price of $1,000,000. The note is due and payable in full on May 18, 2007. Other than the $300,000 discount inherent in the purchase price, the note is non-interest-bearing. The note will be repaid using the proceeds of each put notice delivered by us to Dutchess under the March 2007 Investment Agreement, proceeds from the sale of Biofrontera investment and other capital raised, if any.

On June 30, 2006, we issued to Dutchess a promissory note in the amount of $1,495,000 for a purchase price of $1,150,000. The note is due and payable in full on June 29, 2007. Other than the $345,000 discount inherent in the purchase price, the note is non-interest-bearing. The note will be repaid using the proceeds of each put notice delivered by us to Dutchess under the March 2007 Investment Agreement, proceeds from the sale of Biofrontera investment and other capital raised, if any.

In connection with the notes, we paid Dutchess facility fees of $310,000 and convertible debentures totaling $1,353,750. We also paid approximately $181,000 of fees to Athena Capital Partners, Inc. (Athena). Athena provides investment banking services to us and we paid a four percent fee to Athena for these Dutchess transactions.

The total Dutchess notes outstanding at March 31, 2007 is $5,345,963 with a discount of $200,705. The Dutchess convertible debentures outstanding at March 31, 2007 are $2,013,750 with a discount of $1,811,936. No interest is charged on this note, thus there is a discount on each note and convertible debenture.

During February 2007, a registration statement was declared effective for an additional 61,500,000 shares for the shares underlying the convertible debentures owed to Dutchess.

Dutchess Default

At March 31, 2007, we are in default of $5,345,963 Dutchess Notes due to