GENETIC TECHNOLOGIES LTD
Form 20-F
December 21, 2010
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UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 20-F

o	**REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OF THE SECURITIES EXCHANGE ACT OF 1934**
	OR
x	**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934** **For the fiscal year ended June 30, 2010**
	OR
o	**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
	OR
o	**SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Date of event requiring this shell company report . . . . . .

For the transition period from to

Commission file number 0-51504

GENETIC TECHNOLOGIES LIMITED
(Exact name of Registrant as specified in its charter)

N/A
(Translation of Registrant s name into English)

AUSTRALIA
(Jurisdiction of incorporation or organization)

60-66 Hanover Street, Fitzroy, Victoria, 3065, Australia

Telephone: 011 61 3 8412 7000; Facsimile: 011 61 3 8412 7040
(Address of principal executive offices)

Thomas G. Howitt

Telephone: 011 61 3 8412 7050; Facsimile: 011 61 3 8412 7040

Email: tom.howitt@gtglabs.com

60-66 Hanover Street, Fitzroy, Victoria, 3065, Australia
(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act. **None**

Securities registered or to be registered pursuant to Section 12(g) of the Act.

American Depositary Shares each representing 30 Ordinary Shares and evidenced by American Depositary Receipts
Title of each Class

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Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act. **None**

Number of outstanding shares of each of the issuer s classes of capital or common stock as of the close of the period covered by the annual report.

404,605,152 Ordinary Shares

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

o Yes x No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

o Yes x No

Note Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

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.

x Yes o No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of accelerated filer and large accelerated filer in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer o	Accelerated filer o	Non-accelerated filer x

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP o	International Financial Reporting Standards as issued by the International Accounting Standards Board x	Other o

If Other has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.

o Item 17 o Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

o Yes x No

(APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY PROCEEDINGS DURING THE PAST FIVE YEARS)

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court.

o Yes o No

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INTRODUCTION

In this Annual Report, the Company, Genetic Technologies , we, us and our refer to Genetic Technologies Limited and its consolidated subsidiaries.

Our consolidated financial statements are set out on pages F1 to F43 of this Annual Report (refer to Item 18 Financial Statements).

References to the ADSs are to our ADSs described in Item 12.D American Depositary Shares and references to the Ordinary Shares are to our Ordinary Shares described in Item 10.A Share Capital .

Our fiscal year ends on June 30 and references in this Annual Report to any specific fiscal year are to the twelve month period ended on June 30 of such year.

FORWARD-LOOKING STATEMENTS

This Annual Report contains forward-looking statements that involve risks and uncertainties. We use words such as anticipates , believes , plans , expects , future , intends and similar expressions to identify such forward-looking statements. This Annual Report also contains forward-looking statements attributed to certain third parties relating to their estimates regarding the growth of Genetic Technologies and related service markets and spending. You should not place undue reliance on these forward-looking statements, which apply only as of the date of this Annual Report. Our actual results could differ materially from those anticipated in these forward-looking statements for many reasons, including the risks faced by us described below under the caption Risk Factors and elsewhere in this Annual Report.

Although we believe that the expectations reflected in such forward-looking statements are reasonable at this time, we can give no assurance that such expectations will prove to be correct. Given these uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements. Important factors that could cause actual results to differ materially from our expectations are contained in cautionary statements in this Annual Report including, without limitation, in conjunction with the forward-looking statements included in this Annual Report and specifically under Item 3.D Risk Factors .

All subsequent written and oral forward-looking statements attributable to us are expressly qualified in their entirety by reference to these cautionary statements.

ENFORCEMENT OF LIABILITIES AND SERVICE OF PROCESS

We are incorporated under the laws of Western Australia in the Commonwealth of Australia. The majority of our directors and executive officers, and any experts named in this Annual Report, reside outside the U.S. Substantially all of our assets, our directors and executive officers assets and such experts assets are located outside the U.S. As a result, it may not be possible for investors to affect service of process within the U.S. upon us or our directors, executive officers or such experts, or to enforce against them or us in U.S. courts, judgments obtained in U.S. courts based upon the civil liability provisions of the federal securities laws of the U.S. In addition, we have been advised by our Australian solicitors that there is doubt that the courts of Australia will enforce against us, our directors, executive officers and experts named herein, judgments obtained in the U.S. based upon the civil liability provisions of the federal securities laws of the U.S. or will enter judgments in original actions brought in Australian courts based upon the federal securities laws of the U.S.

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PART I

Item 1. Identity of Directors, Senior Management and Advisers

Item 1.A Directors and Senior Management

The Directors of the Company as of the date of this Annual Report are as follows:

Name	Position/Function	Business Address
Sidney C. Hack	Non-Executive Chairman	60-66 Hanover Street Fitzroy Victoria 3065 Australia
Tommaso Bonvino	Non-Executive Director	60-66 Hanover Street Fitzroy Victoria 3065 Australia
Dr. Malcolm R. Brandon	Non-Executive Director	60-66 Hanover Street Fitzroy Victoria 3065 Australia
Huw D. Jones	Non-Executive Director	60-66 Hanover Street Fitzroy Victoria 3065 Australia

The members of Senior Management of the Company as of the date of this Annual Report are as follows:

Name	Position/Function	Business Address
Dr. Paul D.R. MacLeman	Chief Executive Officer	60-66 Hanover Street Fitzroy Victoria 3065

		Australia
Thomas G. Howitt	Chief Financial Officer and Company Secretary	60-66 Hanover Street Fitzroy Victoria 3065 Australia
Alison J. Mew	Chief Operating Officer	60-66 Hanover Street Fitzroy Victoria 3065 Australia
Dr. David J. Sparling	Vice President Legal and Corporate Development	60-66 Hanover Street Fitzroy Victoria 3065 Australia
Gregory J. McPherson	Vice President Sales and Marketing	60-66 Hanover Street Fitzroy Victoria 3065 Australia
Ivan Jasenko	Quality and Regulatory Manager	60-66 Hanover Street Fitzroy Victoria 3065 Australia
Lewis J. Stuart	General Manager Phenogen Sciences Inc.	9115 Harris Corners Parkway Suite 320 Charlotte North Carolina 28269 USA

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Item 1.B Advisers

Our principal bankers, accountants and legal advisers are as follows:

Name of Adviser	Function	Business Address
PricewaterhouseCoopers	Auditors	2 Southbank Boulevard Southbank Victoria 3006 Australia
Westpac Banking Corporation	Bankers - Australia	530 Collins Street Melbourne Victoria 3000 Australia
KeyBank National Association	Bankers - USA	1130 Haxton Drive Fort Collins Colorado 80525 USA
Bank of America, N.A.	Bankers - USA	155 Town Centre Drive Charlotte North Carolina 28117 USA
Baker & McKenzie	General Counsel	181 William Street Melbourne Victoria 3000 Australia
Sheridan Ross PC	Licensing and Patent Attorneys	1560 Broadway, Suite 1200 Denver Colorado 80202-5141 USA
Greenberg Traurig, LLP	U.S. Securities Counsel	200 Park Avenue New York New York 10166 USA

Item 1.C Auditor

The auditor of the Group s financial statements for the year ended June 30, 2010 was PricewaterhouseCoopers, whose address is 2 Southbank Boulevard, Southbank, Victoria, 3006, Australia. The auditor of the Group s financial statements for the years ended June 30, 2009, 2008, 2007 and 2006 was Ernst & Young, whose address is 8 Exhibition Street, Melbourne, Victoria, 3000, Australia. PricewaterhouseCoopers is the Company s current independent registered public accounting firm, an appointment ratified at the Annual General Meeting held on November 25, 2009.

Item 2. Offer Statistics And Expected Timetable

Not applicable.

Item 3. Key Information

Item 3.A Selected Financial Data

The following selected financial data for the five years ended June 30, 2010 is derived from the audited consolidated financial statements of Genetic Technologies Limited, prepared in accordance with International Financial Reporting Standards (IFRS), which became effective for our company as of our fiscal year ended June 30, 2006. Under IFRS 1 *First-time Adoption of International Financial Reporting Standards* , or IFRS 1, a company adopting IFRS for the first time is required to adopt accounting policies that comply with IFRS and related interpretations that are in effect at the reporting date of its first annual financial statements prepared in accordance with IFRS, in our case June 30, 2006.

The balance sheet data as of June 30, 2010 and 2009 and the statement of comprehensive income data for the fiscal years 2010, 2009 and 2008 are derived from our audited consolidated financial statements included in this Annual Report. Balance sheet data as of June 30, 2008, 2007 and 2006 and statement of comprehensive income data for the 2007 and 2006 financial years are derived from our audited consolidated financial statements which are not included in this Annual Report. The data should be read in conjunction with the consolidated financial statements, related notes and other financial information included herein.

All amounts are stated in Australian dollars as of June 30, as noted.

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GENETIC TECHNOLOGIES LIMITED

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

FOR 2010, 2009, 2008, 2007 AND 2006

	Year ended June 30, 2010 AUD	Year ended June 30, 2009 AUD	Year ended June 30, 2008 AUD	Year ended June 30, 2007 AUD	Year ended June 30, 2006 AUD
Revenue from operations					
Genetic testing services	4,915,528	4,599,286	3,918,692	3,119,131	2,550,221
Reproductive services	890,030	782,803			
Total revenue from operations	5,805,558	5,382,089	3,918,692	3,119,131	2,550,221
Less: cost of sales	(2,716,657)	(2,203,839)			
Gross profit from operations	3,088,901	3,178,250	3,918,692	3,119,131	2,550,221
Other revenue	3,951,178	6,012,014	11,689,120	11,595,297	7,407,982
Other income	213,808	787,529	276,606	340,486	708,411
Employee benefits expenses	(5,945,605)	(6,439,549)	(6,568,966)	(5,556,644)	(5,432,506)
Amortization and depreciation expenses	(3,706,330)	(3,987,996)	(4,755,155)	(4,602,992)	(4,817,277)
Impairment losses and other write-downs	(1,786,533)	(318,025)	(2,378,000)	(1,306,960)	(97,500)
Legal and patent fees	(1,257,145)	(1,386,393)	(873,854)	(748,605)	(1,440,929)
Administration expenses	(979,006)	(1,304,682)	(839,226)	(901,380)	(910,776)
Rent and outgoings	(718,593)	(584,980)	(533,644)	(535,045)	(511,050)
Royalties, license fees and commissions paid	(399,318)	(354,684)	(889,520)	(580,122)	(177,283)
Other laboratory and veterinary expenses	(357,464)	(748,254)	(1,599,644)	(1,989,098)	(2,008,546)
Marketing and promotion expenses	(340,630)	(272,726)	(221,644)	(437,087)	(502,353)
Finance costs	(100,422)	(89,499)	(66,763)	(90,929)	(112,082)
Contract research and trial expenses	(90,000)	(1,209,260)	(1,267,748)	(1,247,775)	(1,345,916)
Net foreign exchange losses			(254,954)	(317,317)	
Net other expenses	(928,050)	(1,140,066)	(1,086,938)	(1,086,662)	(1,218,519)
Loss before income tax	(9,355,209)	(7,858,321)	(5,451,638)	(4,345,702)	(7,908,123)
Income tax expense					
Loss for the year	(9,355,209)	(7,858,321)	(5,451,638)	(4,345,702)	(7,908,123)
Other comprehensive income/(loss)					
Realized gain on sale of available-for-sale investments transferred from reserve	(170,000)				
Unrealized gain on available-for-sale investments		170,000			
Exchange gains/(losses) on translation of controlled foreign operations	(8,623)	(13,408)	(32,624)	(38,535)	26,548
Exchange gains/(losses) on translation of non-controlled foreign operations	3,404	6,133	(9,161)	(12,999)	
Other comprehensive income/(loss) for the year, net of tax	(175,219)	162,725	(41,785)	(51,534)	26,548
Total comprehensive loss for the year	(9,530,428)	(7,695,596)	(5,493,423)	(4,397,236)	(7,881,575)
Loss for the year is attributable to:					
Owners of Genetic Technologies Limited	(9,343,766)	(7,841,073)	(5,446,089)	(4,328,543)	(7,918,773)
Non-controlling interests	(11,443)	(17,248)	(5,549)	(17,159)	10,650
Total loss for the year	(9,355,209)	(7,858,321)	(5,451,638)	(4,345,702)	(7,908,123)

Total comprehensive loss for the year is attributable to:					
Owners of Genetic Technologies Limited	(9,522,389)	(7,684,481)	(5,478,713)	(4,367,078)	(7,892,225)
Non-controlling interests	(8,039)	(11,115)	(14,710)	(30,158)	10,650
Total loss for the year	(9,530,428)	(7,695,596)	(5,493,423)	(4,397,236)	(7,881,575)

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GENETIC TECHNOLOGIES LIMITED

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (cont.)

FOR 2010, 2009, 2008, 2007 AND 2006

	Year ended June 30, 2010 AUD	Year ended June 30, 2009 AUD	Year ended June 30, 2008 AUD	Year ended June 30, 2007 AUD	Year ended June 30, 2006 AUD
Loss per share (cents per share)					
Basic and diluted net loss per ordinary share	(2.5)	(2.1)	(2.1)	(1.5)	(1.2)
Weighted-average shares outstanding	380,965,204	373,906,149	373,906,149	362,389,899	362,389,899

Note: Refer Item 8D in respect of changes to the presentation of these financial statements relating to the disclosure of cost of sales data.

GENETIC TECHNOLOGIES LIMITED

CONSOLIDATED BALANCE SHEET DATA
FOR 2010, 2009, 2008, 2007 AND 2006

	Year ended June 30, 2010 AUD	Year ended June 30, 2009 AUD	Year ended June 30, 2008 AUD	Year ended June 30, 2007 AUD	Year ended June 30, 2006 AUD
Assets					
Current assets	4,502,161	10,103,166	15,893,852	14,600,846	13,960,666
Non-current assets	3,777,411	7,874,565	8,200,726	14,848,181	19,756,241
Total assets	8,279,572	17,977,731	24,094,578	29,449,027	33,716,907
Liabilities					
Current liabilities	(2,478,943)	(3,779,385)	(3,047,002)	(3,248,763)	(2,946,212)
Non-current liabilities	(82,933)	(86,301)	(262,503)	(97,455)	(528,556)
Total liabilities	(2,561,876)	(3,865,686)	(3,309,505)	(3,346,218)	(3,474,768)
Net assets	5,717,696	14,112,045	20,785,073	26,102,809	30,242,139
Shareholders equity					
Contributed equity	72,378,105	71,285,663	70,243,996	70,243,996	70,243,996
Reserves	1,529,142	1,701,899	1,588,804	1,456,895	1,237,524
Accumulated losses	(68,374,028)	(59,030,262)	(51,189,189)	(45,743,100)	(41,414,557)
Minority interests	184,477	154,745	141,462	145,018	175,176
Total shareholders equity	5,717,696	14,112,045	20,785,073	26,102,809	30,242,139

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Exchange rates

The following table sets forth, for the periods and dates indicated, certain information concerning the noon buying rate in New York City for Australian dollars expressed in U.S. dollars per $1.00 as certified for customs purposes by the Federal Reserve Bank of New York.

Period ended	At period end	Average rate	High	Low
Yearly data				
June 2006	0.7423	0.7475	0.7781	0.7056
June 2007	0.8491	0.7899	0.8491	0.7407
June 2008	0.9562	0.8965	0.9644	0.7672
June 2009	0.8055	0.7513	0.9797	0.6073
June 2010	0.8480	0.8820	0.9369	0.7751
Monthly data				
June 2010	0.8480	0.8539	0.8818	0.8192
July 2010	0.9051	0.8786	0.9051	0.8380
August 2010	0.8910	0.9004	0.9170	0.8807
September 2010	0.9640	0.9398	0.9714	0.9093
October 2010	0.9796	0.9811	0.9943	0.9666
November 2010	0.9607	0.9889	1.0143	0.9594
December 2010 (note)	0.9930	0.9850	0.9974	0.9675

Note: Data for the month of December 2010 covers the period up to December 16, 2010.

Item 3.B Capitalization and Indebtedness

Not applicable.

Item 3.C Reasons for the Offer and Use of Proceeds

Not applicable.

Item 3.D Risk Factors

Before you purchase our ADSs, you should be aware that there are risks, including those described below. You should consider carefully these risk factors together with all of the other information contained elsewhere in this Annual Report before you decide to purchase our ADSs.

Risks Related to Us

Our stock price is volatile and can fluctuate significantly based on events not in our control and general industry conditions. As a result, the value of your investment may decline significantly.

The biotechnology sector can be particularly vulnerable to abrupt changes in investor sentiment. Stock prices of companies in the biotechnology industry, including ours, can swing dramatically, with little relationship to operating performance. Our stock price may be affected by a number of factors including, but not limited to:

- product development events;
- the outcome of litigation;
- decisions relating to intellectual property rights;
- the entrance of competitive products or technologies into our market;
- new medical discoveries;
- the establishment of strategic partnerships and alliances;
- changes in reimbursement policies or other practices related to the pharmaceutical industry; or
- other industry and market changes or trends.

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Since our listing on the Australian Securities Exchange in August 2000, the price of our Ordinary Shares has ranged from a low of $0.02 to a high of $1.05 per share. Further fluctuations are likely to occur due to events not within our control and general market conditions affecting the biotechnology sector or the stock market generally. The most significant such event of which we have knowledge took place in August 2003 after a television report in Australia on our company was broadcast. During that week, the price of our shares increased from $0.58 to $0.87 on a volume of 26,000,000 shares traded, which was exceptionally high for us. The share price subsequently retreated.

In addition, low trading volume may increase the volatility of the price of our ADSs. Trading volume in our Ordinary Shares on other markets has not been historically high, and the trading volume of our ADSs on the NASDAQ Global / Capital Markets has typically also been low. Further, because each of our ADSs represents 30 of our Ordinary Shares, trading volume in our ADSs is lower than that for our Ordinary Shares. A thin trading market could cause the price of our ADSs to fluctuate significantly more than the stock market as a whole. For example, trades involving a relatively small number of our ADSs may have a greater impact on the trading price for our ADSs than would be the case if the trading volume were higher.

The following chart illustrates the fluctuation in the price of our shares (in Australian dollars) over the last five years:

The fact that we do not expect to pay cash dividends may lead to decreased prices for our stock.

We have never paid a cash dividend on our Ordinary Shares and we do not anticipate paying a cash dividend in the foreseeable future. We intend to retain future cash earnings, if any, for reinvestment in the development and expansion of our business. Whether we pay cash dividends in the future will be at the discretion of our Board of directors and may be dependent on our financial condition, results of operations, capital requirements and any other factors our Board of directors decides is relevant. As a result, an investor may only recognize an economic gain on

an investment in our stock from an appreciation in the price of our stock.

You may have difficulty in effecting service of legal process and enforcing judgments against us and our Management.

We are a public company limited by shares, registered and operating under the Australian *Corporations Act 2001*. The majority of our directors and officers named in this Annual Report reside outside the U.S. Substantially all, or a substantial portion of, the assets of those persons are also located outside the U.S. As a result, it may not be possible to affect service on such persons in the U.S. or to enforce, in foreign courts, judgments against such persons obtained in U.S. courts and predicated on the civil liability provisions of the federal securities laws of the U.S. Furthermore, substantially all of our directly-owned assets are located outside the U.S., and, as such, any judgment obtained in the U.S. against us may not be collectible within the U.S. There is doubt as to the enforceability in the Commonwealth of Australia, in original actions or in actions for enforcement of judgments of U.S. courts, of civil liabilities predicated solely upon federal or state securities laws of the U.S., especially in the case of enforcement of judgments of U.S. courts where the defendant has not been properly served in Australia.

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Because we are not necessarily required to provide you with the same information as an issuer of securities based in the United States, you may not be afforded the same protection or information you would have if you had invested in a public corporation based in the United States.

We are exempt from certain provisions of the Securities Exchange Act of 1934, as amended, commonly referred to as the Exchange Act, that are applicable to U.S. public companies, including (i) the rules under the Exchange Act requiring the filing with the SEC of quarterly reports on Form 10-Q or current reports on Form 8-K; (ii) the sections of the Exchange Act regulating the solicitation of proxies, consents or authorizations in respect of a security registered under the Exchange Act; and (iii) the sections of the Exchange Act requiring insiders to file public reports of their stock ownership and trading activities and liability for insiders who profit from trades made in a short period of time. The exempt provisions would be available to you if you had invested in a U.S. corporation.

However, in line with the Australian Securities Exchange regulations, we will disclose our semi-annual results which, in accordance with Australian auditing standards, are required to have a limited review semi-annually and be fully audited annually. The information, which may have an effect on the stock price on the Australian Securities Exchange, will also be disclosed to the Australian Securities Exchange and the Securities Exchange Commission. Other relevant information pertaining to our Company will also be disclosed in line with the Australian Securities Exchange regulations and information dissemination requirements for listed companies. We will provide our semi-annual results and other material information that we make public in Australia in the U.S. under the cover of an SEC Form 6-K. Nevertheless, you may not be afforded the same protection or information, which would be made available to you, were you investing in a United States public corporation because the requirements of a Form 10-Q and Form 8-K are not applicable to us.

If significant liquidity does not eventuate for our ADSs on NASDAQ, your ability to resell your ADSs could be negatively affected because there would be limited buyers for your interests.

Historically, there was virtually no trading in our ADSs through the pink sheets after the establishment of our Level I ADR Program. However, subsequent to the Level II listing of our ADSs on the NASDAQ Global Market on September 2, 2005, the trading volumes of our ADSs have increased. The Company subsequently transferred the listing of its ADSs to the NASDAQ Capital Market effective as from June 30, 2010. An active trading market for the ADSs, however, may not be maintained in the future. If an active trading market is not maintained, the liquidity and trading prices of the ADSs could be negatively affected.

In certain circumstances, holders of ADRs may have limited rights relative to holders of Ordinary Shares.

The rights of holders of ADSs with respect to the voting of Ordinary Shares and the right to receive certain distributions may be limited in certain respects by the deposit agreement entered into by us and The Bank of New York Mellon. For example, although ADS holders are entitled under the deposit agreement, subject to any applicable provisions of Australian law and of our Constitution, to instruct the depositary as to the exercise of the voting rights pertaining to the Ordinary Shares represented by the American Depositary Shares, and the depositary has agreed that it will try, as far as practical, to vote the Ordinary Shares so represented in accordance with such instructions, ADS holders may not receive notices sent by the depositary in time to ensure that the depositary will vote the Ordinary Shares. This means that the holders of ADRs may not be able to exercise their right to vote. In addition, under the deposit agreement, the depositary has the right to restrict distributions to holders of the ADSs in the event that it is unlawful or impractical to make such distributions. We have no obligation to take any action to permit distributions to holders of our American Depositary Receipts, or ADRs. As a result, holders of ADRs may not receive distributions made by us.

Our Company has a history of incurring losses.

The business which is now called Genetic Technologies Limited was founded in 1989. We have incurred operating losses in every year of our existence. We incurred net losses of $7,918,773 for the year ended June 30, 2006, net losses of $4,328,543 for year ended June 30, 2007, net losses of $5,446,089 for year ended June 30, 2008, net losses of $7,841,073 for year ended June 30, 2009 and net losses of $9,343,766 for year ended June 30, 2010. As of June 30, 2010, we have accumulated losses of $68,374,028. As of June 30, 2010, the extent of future losses and the time required to achieve profitability remains uncertain.

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Risks Related to our Industry

Our sales cycle is typically lengthy.

The sales cycle for our testing products and license generation is typically lengthy. As a result, we may expend substantial funds and management effort with no assurance of successfully selling our products or services or granting new licenses. Our ability to obtain customers for our genetic testing services depends significantly on the perception that our services can help accelerate efforts in genomics. The sales cycle is typically lengthy. Our sales effort requires the effective demonstration of the benefits of our services to, and significant training of, many different departments within a potential customer. In addition, we sometimes are required to negotiate agreements containing terms unique to each customer. With respect to license generation, it is common for negotiations with licensees to take many months before a license is eventually granted. Our business could also be adversely affected if we expend money without any return.

If our competitors develop more effective products, the results from our operations and financial condition could be affected.

We are subject to limited competition from biotechnology and diagnostic companies, academic and research institutions and government or other publicly-funded agencies that are pursuing products and services that are substantially similar to our genetic testing services, or which otherwise address the needs of our customers and potential customers. Our competitors in the testing market include private and public sector enterprises located in Australia and elsewhere. Many of the organizations competing with us have greater experience in the areas of finance, research and development, manufacturing, marketing, sales, distribution, technical and regulatory matters than we do. In addition, many current and potential competitors have greater name recognition and more extensive collaborative relationships. However, because of our patents, we have virtually no competition in the licensing area.

Our competitive position in the testing and reproductive services area is based upon our ability to:

- create and maintain scientifically-advanced technology and offer proprietary products and services;
- attract and retain qualified personnel;
- obtain patent or other protection for our products and services;
- obtain required government approvals and other accreditations on a timely basis; and
- successfully market our products and services.

If we are not successful in meeting these goals, our business could be adversely affected. Similarly, our competitors may succeed in developing technologies, products or services that are more effective than any that we are developing or that would render our technology and services obsolete, noncompetitive or uneconomical.

For a full discussion of competition see Item 4.B Competition .

We rely heavily upon our patents and proprietary technology and any future claims that our patents are invalid could seriously affect our licensing business and adversely affect our revenues and our financial condition.

We rely upon our portfolio of patent rights, patent applications and exclusive licenses to patents and patent applications relating to genetic technologies. We expect to aggressively patent and protect our proprietary technologies. However, we cannot be certain that any additional patents will be issued to us as a result of our domestic or foreign patent applications or that any of our patents will withstand challenges by others. Patents issued to, or licensed by, us may be infringed or third parties may independently develop either the same or similar technologies. Similarly, our patents may not provide us with meaningful protection from competitors, including those who may pursue patents which may prevent, limit or interfere with our products or will require licensing and the payment of significant fees or royalties by us to such third parties in order to enable us to conduct our business. We may sue or be sued by third parties regarding our patents and other intellectual property rights. These suits are often costly and would divert valuable funds and technical resources from our operations and cause distraction to Management.

We have important relationships with external parties over whom we have limited control.

We have relationships with academic consultants who are not employed by us. Accordingly, we have limited control over their activities and can expect only limited amounts of their time to be dedicated to our activities. These persons may have consulting, employment or advisory arrangements with other entities that may conflict with or compete with their obligations to us. Our consultants typically sign agreements that provide for confidentiality of our proprietary information and results of studies. However, in connection with every relationship, we may not be able to maintain the confidentiality of our technology, the dissemination of which could hurt our competitive position and results of operations. To the extent that our scientific consultants develop inventions or processes independently that may be applicable to our proposed products, disputes may arise as to the ownership of the proprietary rights to such information, and we may not win those disputes.

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If we are unable to protect our proprietary assets, we may not be able to commercialize products or services.

Our commercial success partially depends on our ability to obtain patent protection for many aspects of our business, including the products, methods and services we develop. Patents issued to us may not provide us with substantial protection or be commercially beneficial to us. The issuance of a patent is not conclusive as to its validity or its enforceability. In addition, our patent applications or those we have licensed, may not result in issued patents. If our patent applications do not result in issued patents, our competitors may obtain rights to commercialize our discoveries which could harm our competitive position. We also may apply for patent protection on novel genetic variations in known genes and their uses, as well as novel uses for previously identified genetic variations discovered by third parties. In the latter cases, we may need a license from the holder of the patent with respect to such genetic variations in order to make, use or sell any related products. We may not be able to acquire such licenses on terms acceptable to us, if at all.

Certain parties are attempting to rapidly identify and characterize genes and genetic variations through the use of sequencing and other technologies. To the extent that any patents are issued to other parties on such partial or full-length genes or genetic variations or uses for such genes or genetic variations, the risk increases that the sale of products or services developed by us or our collaborators may give rise to claims of patent infringement against us. Others may have filed and, in the future, are likely to file patent applications covering many genetic variations and their uses. Any such patent applications may have priority over our patent applications and could further require us to obtain rights to previously issued patents covering genetic variations. Any license that we may require under any such patent may not be made available to us on commercially acceptable terms, if at all.

We may be sued for infringing on the intellectual property rights of others. We could also become involved in interference proceedings in the United States Patent and Trademark Office to determine the relative priority of our patents or patent applications and those of the other parties involved in the interference proceeding. Intellectual property proceedings are costly, and could affect our results of operations. These proceedings can also divert the attention of managerial and technical personnel. If we do not prevail in any intellectual property proceeding, in addition to any damages we might have to pay, we could be required to stop the infringing activity, or obtain a license to or design around the intellectual property in question. In interference proceedings, our patent rights could be invalidated and the scope of our patents could be limited. If we are unable to obtain licenses to intellectual property rights that we need to conduct our business, or are unable to design around any third party patent, we may be unable to sell some of our products, which will result in reduced revenue.

We have in the past and may possibly in the future become a party to litigation involving patents and intellectual property rights. We have previously commenced litigation against a number of parties to protect our rights pertaining to our intellectual property. We may in the future receive claims of infringement of intellectual property rights from other parties. If we do not prevail in any future legal proceedings, we may be required to pay significant monetary damages. In addition, we could also be prevented from using certain processes or prevented from selling certain configurations of our products or services that were found to be within the scope of the patent claims. In the event we did not prevail in any future proceeding, we would either have to obtain licenses from the other party, avoid certain product configurations or modify some of our products, services and processes to design around the patents. Licenses could be costly or unavailable on commercially reasonable terms. Designing around patents or focusing efforts on different configurations could be time consuming, and we may have to remove some of our products or services from the market while we were completing redesigns. Accordingly, if we are unable to settle future intellectual property disputes through licensing or similar arrangements, or if any such future disputes are determined adversely to us, our ability to market and sell our products and services could be harmed. This would in turn reduce demands for our services and harm our financial condition and results of operations.

In addition, in order to protect or enforce our patent rights or to protect our ability to operate our business, we may need to initiate other patent litigation against third parties. These lawsuits could be expensive, take significant time to resolve, and could divert Management s attention from other business concerns. These lawsuits could result in the invalidation or limitation in the scope of our patents or forfeiture of the rights

associated with our patents. We may not prevail in any such proceedings and a court may find damages or award other remedies in favor of our opposing party in any of these suits. During the course of any future proceedings, there may be public announcements of the results of hearings, motions and other interim proceedings or developments in the litigation. Securities analysts or investors may perceive these announcements to be negative, which could cause the market price of our stock to decline.

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We may be subject to professional liability suits and our insurance may not be sufficient to cover damages. If this occurs, our business and financial condition may be adversely affected.

Our business exposes us to potential liability risks that are inherent in the testing, manufacturing, marketing and sale of genetic tests. The use of our products and product candidates, whether for clinical trials or commercial sale, may expose us to professional liability claims and possible adverse publicity. We may be subject to claims resulting from incorrect results of analysis of genetic variations or other screening tests performed using our services. Litigation of such claims could be costly. We could expend significant funds during any litigation proceeding brought against us. Further, if a court were to require us to pay damages to a plaintiff, the amount of such damages could significantly harm our financial condition. Although we have public and product liability insurance coverage under broadform liability and professional indemnity policies, for an aggregate amount of $60,000,000, the level or breadth of our coverage may not be adequate to fully cover potential liability claims. To date we have not been subject to any claims, or ultimately liability, in excess of the amount of our coverage. In addition, we may not be able to obtain additional professional liability coverage in the future at an acceptable cost. A successful claim or series of claims brought against us in excess of our insurance coverage and the effect of professional liability litigation upon the reputation and marketability of our technology and products, together with the diversion of the attention of key personnel, could negatively affect our business.

We use potentially hazardous materials, chemicals and patient samples in our business and any disputes relating to improper handling, storage or disposal of these materials could be time consuming and costly.

Our research and development, production and service activities involve the controlled use of hazardous laboratory materials and chemicals, including small quantities of acid and alcohol, and patient tissue and blood samples. We do not knowingly deal with infectious samples. We, our collaborators and service providers are subject to stringent Australian federal, state and local laws and regulations governing occupational health and safety standards, including those governing the use, storage, handling and disposal of these materials and certain waste products. However, we could be liable for accidental contamination or discharge or any resultant injury from hazardous materials, and conveyance, processing, and storage of and data on patient samples. If we, our collaborators or service providers fail to comply with applicable laws or regulations, we could be required to pay penalties or be held liable for any damages that result and this liability could exceed our financial resources. Further, future changes to environmental health and safety laws could cause us to incur additional expense or restrict our operations. We have never had a reportable serious injury through the date of this Annual Report.

In addition, our collaborators and service providers may be working with these types of hazardous materials, including hazardous chemicals, in connection with our collaborations. In the event of a lawsuit or investigation, we could be held responsible for any injury caused to persons or property by exposure to, or release of, these patient samples that may contain viruses and hazardous materials. The cost of this liability could exceed our resources. While we maintain broadform liability insurance coverage for these risks, in the amount of up to $40,000,000, the level or breadth of our coverage may not be adequate to fully cover potential liability claims. To date, we have not been subject to claims, or ultimately liability, in excess of the amount of our coverage. Our broadform insurance coverage also covers us against losses arising from an interruption of our business activities as a result of the mishandling of such materials. We also maintain workers compensation insurance, which is mandatory in Australia, covering all of our workers in the event of injury.

We depend on the collaborative efforts of our academic and corporate partners for research, development and commercialization of some of our products. A breach by our partners of their obligations, or the termination of the relationship, could deprive us of valuable resources and require additional investment of time and money.

Our strategy for research, development and commercialization of some of our products has historically involved entering into various arrangements with academic and corporate partners and others. As a result, our strategy depends, in part, upon the success of these outside parties in performing their responsibilities. Our collaborators may also be our competitors. We cannot control the amount and timing of resources that our collaborators devote to performing their contractual obligations and we have no certainty that these parties will perform their obligations as expected or that any revenue will be derived from these arrangements.

If our collaborators breach or terminate their agreement with us or otherwise fail to conduct their collaborative activities in a timely manner, the development or commercialization of the product candidate or research program under such collaborative arrangement may be delayed. If that is the case, we may be required to undertake unforeseen additional responsibilities or to devote unforeseen additional funds or other resources to such development or commercialization, or such development or commercialization could be terminated. The termination or cancellation of collaborative arrangements could adversely affect our financial condition, intellectual property position and general operations. In addition, disagreements between collaborators and us could lead to delays in the collaborative research, development, or commercialization of certain products or could require or result in formal legal process or arbitration for resolution. These consequences could be time-consuming and expensive and could have material adverse effects on us.

Other than our contractual rights under our license agreements, we may be limited in our ability to convince our licensees to fulfill their obligations. If our licensees fail to act promptly and effectively, or if a dispute arises, it could have a material adverse effect on our results of operations and the price of our Ordinary Shares and ADSs.

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We rely upon scientific, technical and clinical data supplied by academic and corporate collaborators, licensors, licensees, independent contractors and others in the evaluation and development of potential therapeutic methods. There may be errors or omissions in this data that would materially adversely affect the development of these methods.

We may seek additional collaborative arrangements to develop and commercialize our products in the future. We may not be able to negotiate acceptable collaborative arrangements in the future and, if negotiated, we have no certainty that they will be on favorable terms or will be successful. In addition, our collaborative partners may pursue alternative technologies independently or in collaboration with others as a means of developing treatments for the diseases targeted by their collaborative programs with us. If any of these events occurs, the progress of the Company could be adversely affected and our results of operations and financial condition could suffer.

Problems associated with international business operations could affect our ability to license our technology and our results of operations.

We seek to license our intellectual property and to market our growing range of other products and services on a global scale, including in countries that are considered to provide significantly less protection to intellectual property than the United States and Australia. In addition, a number of other risks are inherent in international transactions and commerce, including political and economic instability, foreign currency exchange fluctuations and changes in tax laws.

Government regulation of genetic research or testing may adversely affect the demand for our services and impair our business and operations.

Apart from accreditation requirements, we are generally not subject to regulation. Federal, state and local governments, however, may adopt regulations relating to the conduct of genetic research and genetic testing. These regulations could limit or restrict genetic research activities as well as genetic testing for research or clinical purposes. In addition, if state and local regulations are adopted, these regulations may be inconsistent with, or in conflict with, regulations adopted by other state or local governments. Regulations relating to genetic research activities could adversely affect our ability to conduct our research and development activities. Regulations restricting genetic testing could adversely affect our ability to market and sell our products and services. Accordingly, any regulations of this nature could increase the costs of our operations or restrict our ability to conduct our testing business and might adversely affect our operations and financial condition.

In Australia, there is no law that prohibits the performing of a paternity test by using just a sample obtained from a father and child. In May 2003, the Australian Law Reform Commission (ALRC) released its report into Human Genetic Testing in Australia. In relation to paternity testing, it made various recommendations, the most significant of which was that the testing of a child without the knowledge or consent of both parents should be made illegal. In December 2005, the Australian Government formally responded to the ALRC report. Although it accepted most of the report s recommendations, it did not accept its recommendation that it should be illegal to test a child without the knowledge or consent of both parents. Instead, it recommended that the body that formally accredits laboratories, National Association of Testing Authorities (NATA) should review its accreditation requirements for DNA parentage testing to ensure that laboratories meet the highest technical and ethical standards, particularly in relation to consent to testing, protecting the integrity of genetic samples, and providing information about counselling. As of the date of this Annual Report, NATA has made no recommendation in relation to the Government s recommendation.

In November 2008, the Federal Government released a discussion paper on non-consensual genetic testing in which it is proposed that such testing be made illegal. The purpose of this paper is to obtain feedback from the public and industry on this issue prior to formulating legislation in this area. In the area of paternity testing, the paper discusses the issue of consent but makes no recommendation as to what the required consent for taking a sample from a child would be. For example, does this require the consent of both parents or just one? If the testing of a sample eventually requires the consent of both parents, then this will have a negative impact on our revenue as father/child testing is a substantial and growing market.

Responses to the discussion paper were submitted by the end of January 2009. It is not known how long the Government will take to consider these submissions nor its timeframe to draft and then pass any proposed legislation. If passed, this legislation will immediately become law in the Australian Capital Territory and the Northern Territory. All other States would then be required to pass mirror legislation but are under no obligation to do so. It is not clear how long it would take the States to pass this legislation.

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Gene Patenting Debate in Australia recent developments

In 2008, the Australian Senate commenced an inquiry into the issues surrounding the patenting of genes. The inquiry was due to report its findings in early 2009. Having extended the timeline on several occasions, the Senate inquiry was then interrupted by an Australian Federal election in October 2010. On September 30, 2010, the Senate re-referred the matter to the Senate Community Affairs Committee for inquiry and report.

On November 25, 2010, the report arising from the Senate s inquiry into gene patents was released. It tabled 16 recommendations primarily aimed at making amendments to existing provisions of the Patents Act, while minimizing unforeseen consequences of changes to biotechnology sector, including the potential prohibition on patenting biological materials.

The Senate Report also noted a number of events that may affect further decisions, such as the private member s Bill that was introduced into the Federal Parliament. The Bill was referred immediately to the Legal and Constitutional Affairs Legislation Committee for inquiry and report by June 16, 2011.

The Report also said the Committee heard conflicting evidence as to whether a prohibition on the patenting of genes and other biological materials (a) would be effective, and (b) would not lead to unforeseen consequences in other fields of technology, particularly biotechnology, research and development.

The Patent Amendment (Human Genes and Biological Materials) Bill 2010

The *Patent Amendment (Human Genes and Biological Materials) Bill 2010* was introduced in the Lower House of the Australian Parliament on October 18, 2010. The Bill will now be reviewed by the Legal and Constitutional Affairs - Legislation Committee. The Government s response is expected to be received early in calendar 2011. The same Bill, sponsored by Peter Dutton MP and Rob Oakeshott MP, will be introduced in the House of Representatives in February 2011.

Australian Federal Court Patent Proceeding

In June 2010, a group of Australian plaintiffs initiated litigation in the Australian Federal Court challenging the validity of certain claims of an Australian patent owned by Myriad Genetics Inc. (Australian patent 686004 004). Genetic Technologies was named as a respondent to this matter by virtue of the fact that Genetic Technologies is the exclusive licensee of the BRCA patents in Australia (which includes the 004 patent). This matter bears a striking resemblance to the US litigation filed by the American Civil Liberties Union against Myriad s US patent equivalent in which, during March 2010, a US Federal District Court ruled that isolated DNA sequences are not eligible for patent protection because of the fact that they are derived from natural sources. Myriad has since filed an appeal against the decision.

We rely on the services of individuals who possess special skills and experience.

Much of the future success of the Company depends on the continued service and availability of skilled personnel, including members of its senior executive team, and those in technical, marketing and staff positions. While we actively recruit new employees with such skills and experience to reduce our reliance on these individuals, skilled personnel, with specific experience in the biotechnology industry, are in high demand and competition for their talents is intense.

Ethical and other concerns surrounding the use of genetic information may reduce the demand for our services.

Public opinion regarding ethical issues related to the confidentiality and appropriate use of genetic testing results may influence government authorities to call for limits on, or regulation of the use of, genetic testing. In addition, such authorities could prohibit testing for genetic predisposition to certain conditions, particularly for those that have no known cure. Furthermore, adverse publicity or public opinion relating to genetic research and testing, even in the absence of any governmental regulation, could reduce the potential markets for our services, which could materially and adversely affect our revenues.

Although we are a leader in the field of genetics in Australia, we do not undertake any activities in the contentious areas of cloning, stem cell research or other gene-altering areas. As such, many of the ethical issues that may be relevant to other participants in the genetics industry are not necessarily applicable to us.

Licensing

The patenting of genes and issues surrounding access to genetic knowledge are the subjects of extensive and ongoing public debate in many countries. By way of example, the Australian Law Reform Commission has previously conducted two inquiries into the social uses of genetic information. The patents we hold over uses of non-coding DNA have broad scope and have also been the subject of debate and some criticism in the media. A risk we face is that individuals or organizations in one or more of the countries in which these patents have issued could take legal action to seek their amendment, revocation or invalidation, something which has previously happened on several occasions in various jurisdictions, though we have prevailed in all such cases.

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Furthermore, any time that we initiate legal action against parties that infringe our patents we face a risk that the infringer will defend itself through a counter-claim of patent invalidity or other such claims. Subsequent legal action could potentially overturn, invalidate or limit the scope of our patents.

Under the relevant Patent Act in most of the countries in which our non-coding patents have issued, the relevant judicial system has rights to impose compulsory licensing. The relevant governments typically hold march-in rights by which they may unilaterally choose to exploit the technology. To the extent that the Company s non-coding technology is used in the conduct of research, we also face risks, uncertainty and controversy over the licensing of our technology to those conducting research. Whether or not researchers should be exempted from obligations to take licenses to relevant patents was the subject of another government inquiry conducted by the Australian Council for Intellectual Property who recommended the creation of a research exemption.

During the 2008 calendar year, a Senate Inquiry into matters relating to the granting of patents in Australia over human and microbial genes and non-coding sequences was initiated by the Australian Federal Government. Along with more than 50 other parties representing a wide variety of interested groups, the Company lodged a formal submission to the Inquiry. As of the date of this Report, the final date for the lodging of submissions has passed and the Senate is receiving those which have been lodged ahead of making its recommendations in the 2011 calendar year. Irrespective of the outcome of the Inquiry, the Company anticipates that it will have little, if any, material impact on the Company s business. Refer above for further discussion on the debate surrounding the patenting of genes in Australia.

Genetic testing

There is a risk that a moratorium on genetic testing by the Australian Institute of Sport may impact on the commercialization of our sports performance genetic test for the elite competitor market in Australia. However, this moratorium should not impact our ability to distribute this test throughout the rest of the world. There is also a view held by some elements of the medical and academic communities that the marketing of some of our cancer predisposition tests is done solely with a commercial objective in mind. In essence, some parties have indicated that, in their view, the risk of inheriting certain types of cancer is too low to warrant the marketing of genetic testing services to the wider cancer community where such promotion may increase anxiety unnecessarily. Guidelines laid down by the Australian National Health Medical Research Council also prevent us from promoting our testing in a manner which may cause any unnecessary alarm .

In recent years, health care payors as well as federal and state governments have focused on containing or reducing health care costs. We cannot predict the effect that any of these initiatives may have on our business. In particular, gene-based therapeutics, if successfully developed and commercialized, are likely to be costly compared to currently available drug therapies. Health care cost containment initiatives focused either on gene-based therapeutics or on genetic testing could result in the growth in the clinical market for genetic testing being curtailed or slowed. In addition, health care cost containment initiatives could also cause pharmaceutical companies to reduce research and development spending. In either case, our business and our operating results could be adversely affected. Further, genetic testing in clinical settings is often billed to third-party payors, including private insurers and governmental organizations. If our current and future clinical products and services are not considered cost-effective by these payors, reimbursement may not be available to users of our services. In this event, potential customers would be much less likely to use our services and our business and operating results could be harmed.

In regards to other medical tests we offer, increased competition from countries such as China and India is likely to make inroads to our marketplaces, offering lower priced tests which may decrease our profitability. Within Australia, the continued performance by public institutions of medical diagnostic tests also carries the risk that those institutions may acquire the latest generation of robotic test platforms which are able to perform tests at substantially lower costs. In some cases, these institutions are heavily subsidized by the government and

therefore do not have the same commercial and amortization cost bases of a publicly listed company such as Genetic Technologies. As such, they may be able to offer tests at a lower price than we can.

Launch of BREVAGenTM

With the acquisition and proposed launch of our BREVAGenTM breast cancer test, a number of risks have been identified. The test exists in a new area of genetic testing, being a prognostic test, and it may take time for us to establish credibility and educate the various potential customer groups we have identified. This may result in a lag in establishing reasonable rates of sales which may be aggravated by resistance associated with price sensitivity. Despite various studies and review publications, clinician adoption of the test on a regular basis will require substantial resources and effort. Establishing a new U.S. company will require staffing with salespeople and identification of territories in which to start selling the test. These salespeople will require time to establish customer contact and convert sales. The approval of our Australian laboratory as the core testing facility for the BREVAGenTM test is still dependent on us receiving CLIA approval and without it, we are unable to sell the test in the U.S. marketplace. Alternate plans are in place if such approval is not received but this would delay the proposed timing of the launch. Even with CLIA approval being given to our Australian laboratory, U.S. government health care programs could restrict our ability to offer the test in the U.S., thereby restricting our available market.

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ITEM 4. INFORMATION ON THE COMPANY

Item 4.A History and Development of the Company

We were incorporated under the laws of Western Australia on January 5, 1987 as Concord Mining N.L. On August 13, 1991, we changed our name to Consolidated Victorian Gold Mines N.L. On December 2, 1991, we changed our name to Consolidated Victorian Mines N.L. On March 15, 1995, we changed our name to Duketon Goldfields N.L.

On October 15, 1999, the type of company was changed from a No Liability Company to a company limited by shares. On August 29, 2000, we changed our name to Genetic Technologies Limited, which is our current name. We were originally incorporated as a mining company and gradually phased out our mining activities and became a biotechnology company with the acquisition of GeneType AG in August 2000. Our Australian Company Number (ACN) is 009 212 328. Our Australian Business Number (ABN) is 17 009 212 328. We operate pursuant to our constitution, the Australian *Corporations Act 2001*, the Australian Securities Exchange Listing Rules, the Marketplace Rules of NASDAQ and, where applicable, local legislation.

Since the acquisition of GeneType AG, the directors have disposed of all remaining mining interests so that our activities now focus solely on emerging opportunities in the field of biotechnology. Our current activities in biotechnology primarily concentrate on three clearly defined areas of activity which are covered under Item 4.B Business Overview .

Our registered office, headquarters, laboratory and business activities are all located at 60-66 Hanover Street, Fitzroy, Victoria, 3065 Australia. Our telephone number is +61 3 8412 7000. Our website address is www.gtglabs.com. Information on our website and websites linked to it does not constitute part of this Annual Report.

On August 29, 2000, we acquired 100% of GeneType AG, including all of its valuable patents, and we changed our focus exclusively to the area of biotechnology. We also changed our name to Genetic Technologies Limited to better reflect our new business. In September 2000, our listing was duly transferred from the mining board of the ASX to the industrial board and our shares were thereafter classified under the industry group Health and Biotechnology , completing our transformation from a mining and resources company into a biotechnology company. During 2001, we also acquired 10% of the issued and outstanding shares in Cytomation Inc., based in Fort Collins, Colorado. At that time, Cytomation was a leader in the manufacture and sales of flow cytometers and cell sorters. Also, in December 2001, we acquired an initial shareholding of less than 1% in the issued capital of XY, Inc., a company also based in Fort Collins. In July 2001, we acquired the business of DNA-ID Labs in Perth, Western Australia, as part of our strategy of expanding our paternity testing business in Australia. In March 2002, we formed AgGenomics Pty. Ltd., based in Melbourne, in order to expand our genetic testing services into the field of plant genetics. In May 2003, we acquired the fixed assets of the business Genetic Science Services in Melbourne, in order to further expand into the field of genetic testing. In May 2007, we sold all of our shares in XY, Inc. The total proceeds received from the sale were $332,709 which resulted in a loss on sale of $33,307.

In July 2008, we acquired all of the issued shares of Frozen Puppies Dot Com Pty. Ltd. based in Calga, New South Wales, which is Australia s leading provider of canine reproductive services for a total consideration of $1,550,097, comprising a combination of shares in the Company (with a value of $1,041,667) and cash.

On April 14, 2010, we announced that we had acquired certain assets from Perlegen Sciences, Inc. in California, with the main asset being the BREVAGen breast cancer risk test (BREVAGen). In addition to the BREVAGen test, we also acquired a suite of patents valid to 2022 which augment and extend our current non-coding patent portfolio. On June 28, 2010, we incorporated a wholly-owned subsidiary named Phenogen Sciences Inc. in the State of Delaware which will be licensed to sell the BREVAGen test, and in future other tests, in the U.S. marketplace.

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In early calendar year 2002, we commenced the process of out-licensing our non-coding patents, announcing several early successes. Since then, we have granted commercial licenses to a total of 47 licensees and 6 research licenses to the following parties, which are listed in reverse chronological order of their effective dates:

Commercial licensees

47. Pioneer Hi-Bred International Inc., **USA**
46. Innogenetics NV (medical diagnostic products), **Belgium**
45. Laboratoires Réunis, **Luxembourg**
44. Interleukin Genetics Inc., **USA**
43. Beckman Coulter Inc. / Clinical Data Inc., **USA**
42. Monsanto Company (cattle genetics) **USA**
41. Molecular Pathology Laboratory Network Inc., **USA**
40. EraGen Inc., **USA**
39. Gen-Probe Inc., **USA**
38. TIB MOLBIOL Syntheselabor GmbH, **Germany**
37. Millennium Pharmaceuticals Inc., **USA**
36. GeneDx (Bio Reference Laboratories Inc.), **USA**
35. General Electric Company, **USA**
34. Prometheus Laboratories Inc. **USA**
33. Kimball Genetics Inc., **USA**
32. BioSearch Technologies Inc., **USA**
31. Syngenta Crop Protection AG, **Switzerland**
30. Monsanto Company (swine genetics), **USA**
29. Thermo Fisher Scientific Inc., **USA**
28. Monsanto Company (plant genetics) **USA**
27. Sciona Inc., **USA**
26. Genosense Diagnostics GmbH, **Austria**
25. Innogenetics NV (HLA products), **Belgium**
24. Bovigen LLC, **USA**
23. Optigen LLC, **USA**
22. Applera Corporation, **USA**
18 - 21. Four agriculture groups, **New Zealand**
17. Australian Genome Research Facility Limited, **Australia**
16. Bionomics Limited, **Australia**
15. C.Y. O Connor ERADE Village Foundation, **Australia**
14. ViaLactia Biosciences Limited, **New Zealand**
13. MetaMorphix Inc., **USA** (license subsequently terminated)
12. Genzyme Corporation, **USA**
11. Ovita Limited, **New Zealand**
10. Laboratory Corporation of America Holdings, **USA**
9. TM Biosciences Corporation, **Canada**
8. Quest Diagnostics Inc., **USA**
7. ARUP, **USA**
6. Biotage AB, **Sweden**
5. Myriad Genetics Inc., **USA**
4. Perlegen Sciences Inc., **USA**
3. Nanogen Inc., **USA**
2. Sequenom Inc., **USA**
1. Genetic Solutions Pty. Ltd., **Australia**

Research licensees

6. Texas A&M University (Merlogen Inc.), **USA**
5. Colorado State University, **USA**
4. University of Technology Sydney, **Australia**
3. King s College, London, **England**
2. University of Sydney, **Australia**
1. University of Utah, **USA**

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It is a priority for the Company to continue to identify additional parties who would benefit from taking a license to the Company s non-coding patents. We are now pursuing negotiations with a number of companies and organizations in USA and Europe that would benefit from taking a license to our non-coding patents or from collaborations with our service testing business.

In order to increase the rate at which these licenses can be secured, the licensing team at the Company s headquarters in Melbourne, Australia has been expanded in recent years by the appointment of additional staff to accelerate the preparation of dossiers on potential licensees. Internationally, independent licensing contractors were previously engaged to represent the Company on the ground in our major markets.

On February 16, 2010, we announced that we had filed a patent infringement suit in respect of our non-coding DNA technologies against nine parties in the US District Court, Western District of Wisconsin. The case is being prosecuted by the Company s Colorado-based law firm Sheridan Ross PC and we have put in place arrangements pursuant to which we believe that the patent infringement suit should not have a material adverse impact on our finances. Since filing the suit, non-coding licenses have been granted by us to Gen-Probe Inc., Molecular Pathology Laboratory Network Inc., Monsanto Company, Beckman Coulter Inc. / Clinical Data Inc., Interleukin Genetics Inc. and Pioneer Hi-Bred International Inc. as part of settlements that have been reached with those parties. Further, settlement discussions with a number of the remaining parties, together with other parties who are not involved with the suit, have also commenced and are progressing.

Item 4.B Business Overview

We are a biotechnology company focused on expanding our genetic testing business in the Asia-Pacific region and, with the addition of the BREVAGenTM breast cancer test, in the USA and later in Europe. In addition, we are now pursuing commercial opportunities in other areas of activity:

(i) out-licensing our non-coding patents globally; and

(ii) supporting certain late-stage research and development projects in which we are already involved.

Industry Background

The Human Genome Project announced (in April 2003) the completion of the first draft of the entire sequence of the human genome. The biotechnology industry is now working to build upon the vast amount of knowledge generated by that program in order to develop a better understanding of the genetic basis of human health and disease. Increasingly, genetics is being shown to play a key role in the diagnosis and treatment of many diseases in humans, as well as diseases in animals and plants. Our growing understanding of genetics is now providing new information for understanding such predisposing or causative factors in many of these diseases.

Prior to the Human Genome Project, the successful mapping of the Mouse Genome (published in December 2002) permitted, for the first time, a detailed comparison of human genes and mouse genes. One of the key findings that has arisen from this work is the significant role that non-coding DNA plays in controlling gene function in both human genes and mouse genes. For some scientists, but not for our company, these findings - of the great significance of non-coding DNA to gene function - were new, significant and totally unexpected.

A major focus in science is now the identification and analysis of genetic variations and disease-associated genes within the genome. These genetic variations, or polymorphisms, in the DNA sequences vary between individuals. The most common genetic variations are Single Nucleotide Polymorphisms, or SNPs, which are merely a difference in a single nucleotide. The first draft of the human genome identified over 1.4 million SNPs that can be useful as positional signposts for disease-associated DNA sequences in a gene or as markers to map genes along a chromosome. A significant number of these SNPs (perhaps more than 97%) are now known to be non-coding.

Genomics

A genome is an organism s complete set of DNA and the study of that DNA is called genomics. Genomes vary in size, with bacteria displaying the smallest known genome at 600,000 DNA base pairs, while human and mouse genomes have over 3 billion. The DNA of the human genome is organized into 24 distinct chromosomes that contain from 50 million to 250 million base pairs on each chromosome. The DNA on each chromosome contains genes that are specific sequences that encode proteins that actually perform the work within a cell and also make up the cell itself. Surprisingly, only about 2% to 5% of the human genome is organized into coding DNA, with the remainder being considered to be non-coding DNA. Our patent portfolio is centered on proprietary methods for utilizing the valuable information contained within these non-coding regions.

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Genetic Variability

Almost 99.9% of an individual s genome is identical to that of every other individual s genome. However, even slight variations in sequence can drastically change how a gene functions. Variations can lead to harmless changes, such as blue eyes instead of brown, or to major diseases such as cancer, cystic fibrosis, or cardiovascular disease. Genetic variations can also be responsible for many of the differences in the ways individuals respond to drug therapies. As a result of this knowledge, routine analysis of SNPs and other genetic variations is expected to play an increasingly important role in the discovery and development of new drugs, as well as in a variety of diagnostic therapeutic and other medical and life science applications. Industry sources estimate there are millions of genetic variations in the human genome, creating demand for products and technologies that can quickly and accurately detect and analyze these variations. It is thought that the medicine of the future will be dispensed to a patient based on his or her own specific DNA variations. This type of personalized medicine will require sophisticated genetic tests to determine the genetic composition of an individual, and it is now recognized that such genetic make-up depends not only on the form of the coding DNA, but also the form of the associated non-coding DNA.

Genetic Tests

Most genes come in many different forms, called alleles. One or more allele may be associated with a particular disease state. Genetic testing involves the direct examination of an individual s DNA for a DNA marker associated with the allele of interest. The determination of the particular alleles an individual has within his or her DNA is called genotyping.

The most commonly tested marker of a particular allele is a SNP. As much as 98% of the human genome is considered to be non-coding DNA, the majority of the identified 1.4 million SNPs are also located in non-coding regions of DNA. We believe that a license to our proprietary methods of analyzing non-coding regions of DNA will be absolutely necessary for many of the genetic tests of the future. Similarly, tests for genetic abnormalities or mutations may involve not just individual SNPs, but also groups of SNPs or even larger sequences of DNA, and such abnormal sequences - large or small - may be located either in the coding region alone, or in the non-coding region alone, or in both the coding and non-coding regions of the gene (or genes) under examination. Clearly, the variations within genes that may be responsible for a disease are now known to be much more complicated than was previously understood, and the role of non-coding DNA is now being found to be highly relevant in a growing number of diseases. This similarly applies to genetic disorders in animals and in plants. Accordingly, more and more genetic testing will in future look not only at coding variations, but also at the non-coding variations within a particular gene.

Building the Genetic Testing Business

Background and History of the Paternity Testing Business

In the early 1990 s, GeneType AG established a small service testing laboratory in Melbourne, Australia, initially to show-case its non-coding inventions, but also to generate revenue to help support and fund its ambitious research program in those early days. Following the acquisition of several other small DNA testing laboratories in Australia, GeneType AG consolidated the business such that the Company is now the largest provider of paternity and related testing services in Australia.

In August 2000, we acquired 100% of GeneType AG, including control over all its patents and its service testing business. Later, in July 2001, we acquired the paternity testing business of DNA-ID Labs, another small testing laboratory based in Perth, Western Australia. Overall, we acquired several small businesses, two based in Sydney, New South Wales, one based in Perth and one based in Melbourne, eventually making our service testing laboratory in Melbourne the leading non-Government genetic testing service provider in Australia. We now have extensive experience in providing DNA-based individuality testing for the resolution of disputed paternity, the determination of familial relationships for immigration purposes and for forensic analysis.

The most common type of DNA testing is paternity testing - where we determine the father of a given child. In order to perform this test we take a sample from the mother, alleged father and child. The test can also be performed without the mother s sample but this makes the analysis somewhat more complex and the price for the test increases accordingly.

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Other types of tests we can offer include:

- Y chromosome testing - determines if two males come from the same paternal line, i.e. have a common father or grandfather.

- Mitochondrial DNA testing - determines if two people come from the same maternal line.

- Sibship testing - determines if people are full siblings, i.e. have the same mother and father.

- Maternity testing - determines the mother of a given child.

- DNA typing - reveals the DNA makeup of an individual.

- Grandparent analysis - determines the grandparents of a given child. This is mainly used when the father of a child is deceased and a will is being contested.

- Antenatal DNA testing - determines the father of an as-yet unborn child.

- Semen analysis - determines if semen is present on, for example, an article of clothing. If it is, we can DNA type this sample and compare it to a reference sample.

We issue reports for the Family Court in Australia and provide similar services internationally for the Department of Immigration and Citizenship (DIAC). We are one of only two DNA testing laboratories in Australia recognized by DIAC to provide DNA tests for immigration purposes.

Over time, we have gained a reputation as a leading genetic testing laboratory, and progressively, we have started to receive specimens for testing from other countries, most of which are located in the Asia-Pacific region. In addition, we received requests to perform tests outside of human paternity, and this has caused us to consider and now plan a significant expansion of our testing services.

Expansion of Testing Services Beyond Paternity Testing

(1) Plant Testing - in March 2002, we formed a joint venture with the Victorian State Government s Department of Primary Industry, for the purpose of providing a high throughput genotyping service for plant testing - in order to help plant breeders identify the genes responsible for the detection of commercially relevant traits, such as resistance to disease, accelerated growth and the improvement of crop yields. A new company, AgGenomics Pty. Ltd., was formed, with us as the majority shareholder and the State agency as the minority partner. AgGenomics is located at the Victorian AgriBiosciences Centre at La Trobe University R&D Park in Melbourne, Victoria.

(2) Medical Testing - the strategic alliance with Myriad Genetics Inc. delivered to the Company exclusive rights in Australia and New Zealand to perform DNA testing for susceptibility to a range of cancers. In April 2003, we established our cancer susceptibility testing facility. In June 2003, this facility was granted provisional accreditation by the National Association of Testing Authorities, Australia (NATA). This important area of testing continues to build momentum, with the addition of new equipment, new employees joining the Company and new technology becoming available exclusively to us, such that the Australian community now has access to some of the latest technologies available for genetic testing.

In November 2003, the Company joined the world-wide genetic testing network GENDIA as the sole reference laboratory for the network in Australia and New Zealand. GENDIA consists of more than 50 laboratories from around the world, each contributing expertise in their respective disciplines to create a network capable of providing more than 2,000 different genetic tests. This has provided the Company with the ability to offer comprehensive testing services to its customer base in the Asia-Pacific region as well as increasing our exposure to other markets.

In November 2004, the Company announced a strategic alliance with Australian biotechnology company Bionomics Limited for the commercialization of the diagnostic genetic test for the condition Severe Myoclonic Epilepsy in Infancy. This test was the first to expand the Company s human molecular diagnostics focus beyond cancer susceptibility testing. In July 2006, we further cemented our position as Australia s leading independent provider of complex genetic testing services with NATA granting further accreditation of our Melbourne laboratory to provide a wide range of complex genetic tests. Genetic analysis for the predisposition and diagnosis of a wide range of disease states is increasingly being used by clinicians in standard medical practice. We committed to providing the gold standard in testing technology, with superior turn-around times and a substantially more cost efficient service. Attainment of the further accreditation by NATA in the area of complex gene sequencing testing services has enabled numerous government funded genetics services to begin utilizing the Company s testing service to improve patient care.

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For the financial year ended June 30, 2010, we generated revenue in the Medical division of $1.73 million, representing an increase of more than 20% over the previous financial year. Having established an excellent laboratory service with significant excess capacity, the Company announced in July 2008 that a commercial decision had been made to enforce the rights granted to it under an exclusive license from Myriad to perform diagnostic testing of the BRCA1 and BRCA2 genes in Australia and New Zealand. However, following the removal of five Directors from the Board at the Company s Annual General Meeting on November 19, 2008, the new Board undertook a formal review of the Company s decision to enforce its BRCA testing rights and subsequently resolved to immediately revert to its original decision to allow other laboratories in Australia to freely perform BRCA testing.

In October 2009, a new strategic direction was established to focus efforts in creating a portfolio of tests that would be aimed at assisting medical clinicians with cancer management. This would comprise tests that were created by the Company and in-licensed from third parties which would then be marketed by Genetic Technologies in the Asia Pacific region. In November 2009, distribution agreements were executed with Trimgen and Rosetta Genomics of the US to acquire distribution rights for their tests across Oceania. In addition to the current test portfolio, GTG began introducing itself to the Oncology market via regular attendance at medical conferences and direct to market selling activities. An additional agreement to acquire local distribution rights from Response Genetics of the U.S. was then executed by the Company in January 2010.

In December 2009, GTG took a four month option to investigate the purchase of various assets from Perlegen Sciences, Inc. of Mountain View, California which included the breast cancer non-familial risk assessment test, BREVAGen . Those assets were subsequently purchased in April 2010. Work then began on validating the test in GTG s Melbourne-based laboratory as well as initiating the process for obtaining CLIA certification which would enable the Company to undertake the testing of samples received from the U.S. market. By July 2010, a new U.S. subsidiary named Phenogen Sciences Inc. had been incorporated by the Company in Delaware to market and distribute the BREVAGen test across mainland USA. Since then, Phenogen Sciences has established an office in Charlotte, North Carolina and employed several key personnel, including a General Manager named Mr. Lewis Stuart.

The BREVAGen test combines a lifestyle risk assessment using the Gail score, with a personalized genetic risk assessment. The two parts give a BREVAGen score for five year and lifetime risk assessment as well as being compared to clinical threshold levels for treatment established by the American Cancer Society and the American Society of Clinical Oncology. We believe there are in the order of one million women a year in the USA who have a breast biopsy result that is not invasive cancer yet they may want to know their future risk of getting breast cancer. BREVAGen is a prognostic tool to help clinicians better determine what sort of proactive treatment or surveillance strategy to employ with such patients.

(3) Animal Testing - in May 2003, we acquired the assets of Genetic Science Services to expand the range of tests we can offer to include relevant genetic testing in animals - for example, progeny testing in horses, dogs, deer, sexing in birds, and animal disease identification and susceptibility testing for a range of animals, including exotic and zoo animals. This acquisition also allowed the Company to support research projects involving, for example, the Australian fur seal and various frogs and reptiles.

In addition to NATA accreditation for complex genetic analysis mentioned above, in 2006 GTG also received NATA accreditation for the provision of canine forensic analysis services. We are the only laboratory in Australia to receive such accreditation. This accreditation ensures that we will continue to be the laboratory of choice for all canine forensic analysis, especially where prosecutions are initiated for dog attacks. In the state of Victoria alone, there are in excess of 7,000 dog incidents reported annually. This accreditation, together with the recent announcement of a genetic test to determine the breed of dogs, places the Company in a strong position to provide genetic analysis services to local councils around Australia.

During 2008, the Company launched our Dog Attack Pack, a forensic tool enabling local government officers to collect samples from dog attacks and BITSA , a breed identification test that uses DNA analysis to provide a history of a dog s breed.

In July 2008, we acquired Frozen Puppies Dot Com Pty. Ltd., an Australian company specializing in canine reproductive services. Since then, the Company has made excellent progress expanding its facilities into territories outside of Australia, developing strong relationships with breeders and associations in China, Japan, New Zealand and elsewhere. Staff has been employed to manage the Company s activities in these territories and purpose-built facilities have now been established on the outskirts of Beijing, China and in several States of Australia.

In September 2009, GTG again won a tender for being the exclusive provider of genetic services to Greyhounds Australasia for a period of two years. At this time, the Company s animals business was re-launched through a new website; www.animalnetwork.com.au which provides information on genetic tests, a database of breeder dog results supplied from GTG tests, services and the ability to order tests online.

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By late 2009, the new strategy for GTG of focusing on genetic health started to impact the way resources would be used in the animals business. This change in strategic direction meant that many ad-hoc and small / infrequent volume animal tests were eliminated from the animal testing portfolio. A decision to focus solely on canine genetic tests meant an increase in establishing relationship with new channel partners. In the Veterinary market, Gribbles was appointed as the Company s exclusive distribution partner for Australia and New Zealand. In the animal welfare area, our relationship with Lort Smith Animal Hospital continued and additional relationships established with the Animal Welfare Leagues in New South Wales and South Australia and the New Zealand Kennel Club. Outside the main cities, distribution agreements were set up with ART in Rockhampton, Queensland. From April to September 2010, GTG was invited to tender for the provision of canine genetic tests to the China Kennel Union. This is the largest canine club in China with current membership of 176,000 members. GTG subsequently won a three year tender which will be serviced out of the GTG office in Beijing with tests to be conducted in the Company s Melbourne laboratory.

With the increased emphasis and resourcing in the genetic business, a decision was taken during the 2010 financial year to move away from building the Frozen Puppies Dot Com business. As a result, most of the existing centers have now been sold off to various parties who have a reputation for providing reproductive services. GTG is, however, still able to work with those centers to provide its genetic testing services.

(4) Forensic Testing - recognizing the increasing use of DNA analysis in forensics and the demand this would place on existing government laboratories, in February 2004, the Company successfully gained forensics accreditation from the National Association of Testing Authorities, Australia (NATA). We were the first non-government laboratory in Australia to be awarded this accreditation. Since then, we have developed a highly efficient and technologically advanced forensics laboratory. This capability was substantially advanced by our recent non-coding licensing deal with Applera Corporation under which we secured equipment and supplies essential to conducting forensics analysis. Together with these resources and our experience in DNA analysis, the Company is becoming a major provider of DNA analysis services to the forensics community.

In April 2006, we announced that we had been awarded a contract to supply the New South Wales (NSW) Police Force with DNA analysis services. Under the contract, we provided services for an initial trial period of three months. Following this successful trial, we executed a three year contract with the NSW Police Force in January 2008 for DNA analysis services for their volume crime samples, such as burglary and motor vehicle theft. This contract represented a major breakthrough for the Company and was the first time in Australia that any Police Force had awarded a long-term contract to outsource the testing of their crime samples. The current contract with the NSW Police Force ends in January 2011. As of the date of this Annual Report, discussions are underway to explore initiating the first one year option and defining the type of work that would be involved. The feedback regarding the contracted work to date has been wholly positive and the turnaround time targets stipulated in the current contract have been well exceeded.

We believe that a significant opportunity exists for the Company to assist other policing authorities to expeditiously process DNA samples and discussions have been held with two other State-based Police forces to investigate how GTG s forensic capability could be utilized in their operations. It is estimated that there is a substantial backlog of DNA samples currently waiting to be processed by these and other police departments throughout Australia. This work would be in addition to the processing of DNA samples collected on an ongoing basis from crime scenes.

(5) Athletic Performance Testing - the Company acquired the commercial rights from the University of Sydney for a genetic test, known as the ACTN3 Sports Gene Test , which is capable of determining whether or not this gene is providing athletes with a genetic advantage for sprint-power performance. In September 2005, we announced the official launch of this test in Japan with its Japanese distribution partner, Sportsstyle, to an audience of over 100 sports specialists, including the President of the Japan Federation of Health and Sports. The launch of the ACTN3 SportsGene Test was widely reported in the Japanese press. All commercial ACTN3 SportsGene Tests from Japan are analysed at our laboratory in Melbourne. In conjunction with Sportsstyle, we have held meetings with influential sporting bodies looking to use the ACTN3 SportsGene Test as part of their training and assessment program.

On January 7, 2008, the Company appointed Colorado-based talent identification company EPIC Athletic Performance Inc. (EPIC) as a non-exclusive distributor of the ACTN3 SportsGene Test® product in the United States. Samples have been received through calendar 2009, but it is not known at this point whether there is an ongoing market for such a test.

During 2009, distribution agreements / amendments were established in Japan, Western Europe and Greece, with interest having also been received from South America and India. The market for these tests is confined largely to specific professional sporting bodies and as such the volume for such a test is limited to those types of niches.

Distributors are being set in place in various parts of the world to sell the ACTN3 SportsGene Test . More information regarding the market potential of this product will be known by the end of calendar 2010.

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(6) Reproductive Services with the acquisition of Frozen Puppies Dot Com Pty. Ltd. in July 2008, the Company acquired a canine fertility clinic in Calga, New South Wales, Australia and established another clinic in Beijing, China. Further clinics were then established with the aim of combining both fertility services and DNA disease and trait tests to customers and breeders in both Australia and overseas. During the 2010 financial year, the Company made the strategic decision to exit this market. For details refer to the Animal Testing section above.

Our Patent Portfolio

The acquisition of GeneType AG gave our company ownership rights to a potentially significant portfolio of issued patents. The major families of patents in the portfolio as of the date of this Annual Report include:

(a) Intron Sequence Analysis;

(b) Genomic Mapping;

(c) Laboratory Techniques;

(d) Perlegen;

(e) BREVAGen ;

(f) Ancestral Haplotypes;

(g) Athletic Performance;

(h) ImmunAid Project;

(i) Nematode Project; and

(j) RareCellect Project.

(a) The Intron Sequence Analysis patents - allow for the detection of specific motifs within the genetic material in the non-coding regions of DNA which have been shown may be linked to certain alleles or haplotypes within the coding region of the gene. In other words, whereas most geneticists previously looked at the genetic information located within the coding region alone, our inventions have provided a means of also looking at additional useful information which is located within the non-coding part of the gene, and which is now known to also be important in influencing gene function and, in particular, protein production. The method is useful, for example, in the determination of tissue typing for transplantation in order to test for possible likely acceptance or rejection of bone marrow or tissue grafts. The method is also useful in the detection of genetic changes or mutations in the non-coding region of certain genes associated with a higher incidence of certain genetic diseases, such as cystic fibrosis, susceptibility to breast cancer, multiple sclerosis, Alzheimer s Disease, etc. It is also now known that more than 100 human diseases are associated with genetic changes in the non-coding part of a particular gene and which are linked to the function of the coding part of that gene. Similar applications also exist in animals and plants. Several important markers in livestock, for example, have been shown to be located in the non-coding part of the DNA and also linked to particular coding function - for example, marbling or tenderness. It has also been shown that variations in the non-coding DNA of plants can influence their function, including the color of flowers and the timing of germination and growth.

(b) The Genomic Mapping patents - describe methods for analyzing genetic material collected from various selected populations to identify and locate genes and markers of interest, by identifying highly polymorphic sites throughout the genome and particular haplotypes associated with such sites, all based on a reading of sequence information in both the coding and the non-coding portions of the genome.

(c) The Laboratory Techniques patents - describe a method for identifying band positions in an electrophoretic separation by also including a control, which serves as an internal standard.

(d) The Perlegen patents - describe the family of patents that were acquired from Perlegen Sciences, Inc. that provide methods for discovering genetic associations to disease and which build on and augment the Genomic Mapping patents.

(e) The BREVAGen patents - describe a combination of method and product filings which describes a breast cancer prognostic test based on both genetic and clinical factors to deliver an improved understanding of an individual s risk of contracting breast cancer.

(f) The Ancestral Haplotypes patents - describe a method for determining ancestral haplotypes using haplospecific geometric elements within the major histocompatibility complex multi-gene cluster and methods of genetic analysis involving the amplification of complimentary duplicons. These patents were acquired from the C.Y. O Connor ERADE Village Foundation in Western Australia.

(g) The Athletic Performance patents - describe a method that enables aspects of athletic performance to be predicted based on detection of various forms of the alpha actinin 3 (ACTN3) gene. These patents were acquired from the University of Sydney in New South Wales.

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(h) The ImmunAid Project patents - describe various methods aimed at improving the efficacy of cancer therapy and treatment of HIV-AIDS and form the basis of the ImmunAid project.

(i) The Nematode Project patents - describe means to identify and to control a variety of species of parasites. The patent applications describe the use of modern genetic technologies to identify celluar targets for two novel classes of chemicals which can be used to control the major parasitic worms of sheep and cattle. These nematodes are responsible for extensive economic losses to the sheep and cattle industries and are rapidly developing resistance to the existing chemicals. The novel classes of chemical described in these patents offer a safe and highly effective alternative.

(j) The RareCellect Project patents - the older patents describe a novel and safe method for the isolation and collection of fetal cells from the peripheral blood of a pregnant woman, utilizing various HLA or other markers plus flow cytometry - all without any invasive procedure that might endanger the mother or the child. Together with more recent patents, these form the basis of the intellectual property associated with the RareCellect project.

The many issued, allowed and pending patents claimed by GeneType AG, and which are now owned by our Company, distinguish us from competitors by giving us the legal right to claim ownership of proprietary methods and compositions for analysis of DNA using information contained within non-coding regions and for isolation of fetal cells. The methods and compositions for analysis of DNA may be used to identify a particular form of a gene or to map the location of a disease-associated gene along a chromosome.

In total, we have 13 issued patents and 22 patent applications in the United States. Reflecting our international business strategy, we have also sought and been granted foreign patents by many other major industrialized nations, corresponding to each of the major patents already issued in the United States.

Generally, United States patents filed with the United States Patent Office prior to June 8, 1995 have a term of 17 years from the date of issuance, and 20 years from the application filing date or earlier claimed priority date in the case of patents issued from applications filed on or after June 8, 1995. For applications filed after May 29, 2000, the term is 20 years from the date of filing. A minimum term of 17 years is assured, provided the applicant causes no delays during prosecution. Patents in most other countries have a term of 20 years from the date of filing the patent application. Our issued United States patents began to expire in 2009. We intend to continue to file patent applications as we develop new products, technologies and patentable enhancements. Prosecution practices have been implemented to avoid any applicant delays that could compromise the 17-year minimum term. There can be no guarantee that such procedures will prevent the loss of a potential patent term. This is particularly true in the short-term as the patent rules implementing the most recent patent term changes are largely new and untested.

Complex legal and factual determinations and evolving law make patent protection uncertain. As a result, we cannot be certain that patents will be issued from any of our pending patent applications or from applications licensed to us or that any issued patents will have sufficient breadth to offer meaningful protection. In addition, our issued patents may be successfully challenged, invalidated, circumvented or rendered unenforceable so that our patent rights would not create an effective competitive barrier. Moreover, the laws of some countries may not protect our proprietary rights to the same extent as do the United States patent laws.

In addition to patent protection, we rely on trade secret protection of our intellectual property. We attempt to protect our trade secrets by entering into confidentiality agreements with third parties, employees and consultants. Our employees and consultants are required to sign agreements to assign to us their interests in discoveries, inventions, patents, trademarks and copyrights arising from their work for us. They are also required to maintain the confidentiality of our intellectual property, and refrain from unfair competition with us during their employment and for a certain period of time after their employment with us, which includes solicitation of our employees and customers. We cannot be certain these agreements will not be breached or invalidated. In addition, third parties may independently discover or invent competing technologies or reverse engineer our trade secrets or other technologies.

In the future, we may become involved in lawsuits in which third parties file claims asserting that our technologies or products infringe on their intellectual property. We cannot predict whether third parties will assert such claims against us or against the licensors of technologies licensed to us, or our licensees, or whether those claims will hurt our business. We may be forced to defend against such claims, whether they are with or without merit or whether they are resolved in favor of or against our licensors or us and may face costly litigation and diversion of Management s attention and resources. As a result of such disputes, we may have to develop costly non-infringing technologies or enter into licensing agreements. These agreements may oblige us to accept costly terms, which could seriously limit the ability to conduct our operations and affect adversely our financial condition.

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In addition, we may become involved in lawsuits in which third parties file claims asserting that one or more of our patents are invalid. We cannot predict whether third parties will assert such claims against us or against the licensees of such patents, or whether those claims will have an adverse impact on our business. We may be forced to defend against such claims, whether they are with or without merit or whether they are resolved in favor of or against our licensees or us and may face costly litigation and diversion of Management s attention. During the period from February 2001 through March 31, 2002, we had in place a patent insurance policy, placed with GE Reinsurance Corporation through Dexta Corporation Limited, their managing general agents in Australia. Although the policy was not renewed on its expiry, since we had advised Dexta of 13 companies prior to March 31, 2002 as potential infringers, a significant portion of our expenses incurred to date relating to the prosecution of our claims have been covered by the policy.

Of those 13 so identified, we have secured licenses with six, relinquished our claims against four and commenced proceedings against Applera, Covance and Nuvello. The suits against Covance and Nuvello were subsequently settled. On December 12, 2005, we announced the final settlement of our patent dispute with Applera Corporation, further to a settlement conference held in San Francisco, California. The parties had executed a number of binding agreements, including a final Settlement Agreement plus license agreements and a supply agreement and, subsequently, they jointly applied to Northern California District Court requesting that all claims and counterclaims in the legal action be dismissed forthwith. The total value of the consideration receivable by us is approximately $15 million, payable partly in cash and partly in kind, including agreements supplying the Company with certain Applera equipment, reagents and intellectual property rights. Recognition of in-kind consideration as revenue is subject to us meeting certain revenue recognition criteria including, but not limited to, the measurement of fair value at the time of receipt.

Our Patents

Our current patent portfolio is described below. Numbers refers to either provisional, application, publication or patent number.

	Country / region	Numbers	Granted	Pending
INTRON SEQUENCE ANALYSIS				
Intron sequence analysis method for detection of adjacent and remote locus alleles as haplotypes	Australia	AU654111	•	
Earliest priority August 25, 1989		AU672519	•	
	Austria	AT144797	•	
	Belgium	EP414469	•	
	Canada	CA2023888	•	
	Denmark	DK414469	•	
	Europe	EP414469	•	
	France	EP414469	•	
	Germany	DE69029018	•	
		DD299319	•	
	Great Britain	EP414469	•	
	Greece	GR3022410	•	
	Hong Kong	HK1008053	•	
	Israel	IL95467	•	
	Italy	EP414469	•	
	Japan	JP3206812	•	
	Luxembourg	EP414469	•	
	Netherlands	EP414469	•	
	New Zealand	NZ235051	•	

Singapore	SG47747	•
South Africa	ZA9006765	•
Spain	ES2095859	•
Sweden	EP414469	•
Switzerland	EP414469	•
United States	US5192659	•
	US5612179	•
	US5789568	•

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	Country / region	Numbers	Granted	Pending
GENOMIC MAPPING				
Genomic mapping method by direct haplotyping using intron sequence analysis	Australia	AU647806	•	
Earliest priority July 11, 1990	Austria	AT185377	•	
	Belgium	EP570371	•	
	Canada	CA2087042	•	
	Denmark	DK570371	•	
	Europe	EP570371	•	
	France	EP570371	•	
	Germany	DE69131691	•	
	Great Britain	EP570371	•	
	Ireland	IE912426	•	
	Israel	IL98793	•	
	Italy	EP570371	•	
	Japan	JP3409796	•	
	Luxembourg	EP570371	•	
	Netherlands	EP570371	•	
	New Zealand	NZ238926	•	
	South Africa	ZA9105422	•	
	Sweden	EP570371	•	
	Switzerland	EP570371	•	
	United States	US5851762	•	
PERLEGEN				
Methods for genetic analysis	United States	US7127355	•	
Earliest priority March 5, 2004	Europe	EP05724834.6		•
	Japan	JP2007502088		•
Methods for genetic analysis	Australia	AU2008304485		•
Earliest priority September 27, 2007	Canada	CA2704152		•
	Europe	EP2198381		•
	United States	US12/236036		•
Methods for genomic analysis	Australia	AU785425	•	
Earliest priority March 30, 2001	Israel	IL148783	•	
	United States	US6969589	•	
	Canada	CA2380047		•
	Europe	EP1246114		•
	Israel	IL186298		•
	United States	US12/795361		•
Methods for identifying matched groups	United States	US7124033	•	
Earliest priority April 30, 2003				
Genetic analysis systems and methods	Australia	AU2003202919	•	
Earliest priority January 7, 2002	United States	US6897025	•	
	Canada	CA2472646		•
	Europe	EP037020328		•
	Japan	JP2003558032		•
		JP2008195647		•
Life sciences business systems and methods	United States	US6955883	•	

Earliest priority March 26, 2003	US7427480	•

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	Country / region	Numbers	Granted	Pending
PERLEGEN (cont.)				
Pharmaceutical and diagnostic business systems and methods	United States	US7135286	•	
Earliest priority March 26, 2002				
Haplotype structure of Chromosome 21 (LQTS)	United States	US7115726	•	
Earliest priority March 30, 2001				
BREVAGen				
Markers for breast cancer	Australia	AU20066320559		•
Earliest priority November 29, 2006	Canada	CA2631621		•
	China	CN20068005171.0		•
	Europe	EP06838661.4		•
	Hong Kong	HK09101235.4		•
	Israel	IL191566		•
	Japan	JP2008543446		•
	Korea	KR1020087015808		•
	United States	US12/370833		•
		US12/370972		•
		US12/370992		•
		US12/890272		•
Methods for breast cancer risk assessment	United States	US12/920815		•
Earliest priority June 1, 2009	World	PCT/AU2010/000675		•
LABORATORY TECHNIQUES				
Internal standards for electrophoretic separations	Austria	AT159589	•	
Earliest priority July 11, 1990	Europe	EP466479	•	
	France	EP466479	•	
	Germany	DE69127999	•	
	Great Britain	EP466479	•	
	Japan	JP4232850	•	
	Sweden	EP466479	•	
	United States	US5096557	•	
ANCESTRAL HAPLOTYPES				
Genetic analysis	Europe	EP660877	•	
Earliest priority November 1, 1991	France	EP660877	•	
	Germany	DE69232726	•	
	Great Britain	EP660877	•	
	World	WO9309249	•	
	United States	US6383747	•	
Methods of genetic analysis involving the amplification of complementary duplicons	Australia	AU2006214800		•
Earliest priority February 16, 2005	Canada	CA2597947		•
	Europe	EP1848819		•
	United States	US2009150080		•

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	Country / region	Numbers	Granted	Pending
ATHLETIC PERFORMANCE				
ACTN3 genotype screen for athletic performance	Australia	AU2003258390	•	
Earliest priority September 16, 2002	India	IN216886	•	
	New Zealand	NZ538890	•	
	Russia	RU2388829	•	
	United States	US7615342	•	
	Canada	CA2499084		•
	China	CN1732270		•
	Europe	EP1546403		•
	Japan	JP2005538710		•
IMMUNAID PROJECT				
A retroviral immunotherapy	Australia	AU2003200583	•	
Earliest priority August 18, 2000	China	CN1469746	•	
	New Zealand	NZ524280	•	
	Europe	EP1311267		•
	United States	US12/233369		•
Cancer therapy	Australia	AU2003203051	•	
Earliest priority February 14, 2002	Europe	EP090075391		•
	United States	US2005180971		•
Methods of treating diseases	United States	US61/181508		•
Earliest priority May 27, 2009	World	PCT/AU2010/000649		•
Strategy for retroviral immunotherapy	Singapore	SG105903	•	
Earliest priority February 20, 2002	South Africa	ZA200407143	•	
	Europe	EP1482971		•
Method of therapy	New Zealand	NZ546873	•	
Earliest priority October 24, 2003	Singapore	SG121609	•	
	Australia	AU2004283322		•
	Canada	CA2543490		•
	Europe	EP1692516		•
	Japan	JP2007509078		•
	Mexico	PA/a/2006/004522		•
	United States	US2007202119		•
Therapeutic strategy for treating autoimmune and degenerative diseases	Australia	AU2005282218		•
Earliest priority September 8, 2004	Canada	CA2579353		•
	Europe	EP1805510		•
	Japan	JP2007530544		•
	United States	US11/574911		•
NEMATODE PROJECT				
Compounds, composition and methods for controlling invertebrate pests	South Africa	ZA2009/03306	•	
Earliest priority November 15, 2006	Australia	AU2007321720		•
	Canada	CA2670259		•
	Europe	EP78155652		•

New Zealand	NZ576963	•
United States	US2010137294	•

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	Country / region	Numbers	Granted	Pending
NEMATODE PROJECT (cont.)				
Compositions and methods for control of invertebrate pests	Australia	AU2009906188		•
Earliest priority December 21, 2009				
High resolution analysis of genetic variation within *Cryptosporidium parvum*	Australia	AU2003250619	•	
Earliest priority August 21, 2002				
RARECELLECT® PROJECT				
Fetal cell recovery method	Australia	AU649027	•	
Earliest priority March 27, 1990	Austria	AT194166	•	
	Belgium	EP521909	•	
	Canada	CA2059554	•	
	Denmark	DK521909	•	
	Europe	EP521909	•	
	France	EP521909	•	
	Germany	DE69132269	•	
	Great Britain	EP521909	•	
	Greece	GR3034487	•	
	Ireland	IE910996	•	
	Israel	IL97677	•	
	Italy	EP521909	•	
	Japan	JP2965699	•	
	Luxembourg	EP521909	•	
	Netherlands	EP521909	•	
	New Zealand	NZ237589	•	
	Singapore	SG79188	•	
	South Africa	ZA9102317	•	
	Spain	ES2149760	•	
	Sweden	EP521909	•	
	Switzerland	EP521909	•	
	United States	US5447842	•	
Maternal antibodies as fetal cell markers to identify and enrich fetal cells from maternal blood	New Zealand	NZ537328	•	
Earliest priority May 31, 2002	Singapore	SG108133	•	
	Australia	AU2003229397	•	
	Japan	JP2005528616	•	
	Canada	CA2492631		•
	Europe	EP1532453		•
	Hong Kong	HK1075699		•
	United States	US10/516430		•
Identification of fetal DNA and fetal cell markers in maternal plasma or serum	Australia	AU2004217872		•
Earliest priority March 5, 2003	United States	US10/547721		•
Methods of enriching fetal cells	Europe	EP06721493		•
Earliest priority May 11, 2005	Japan	JP2008510361		•
	Canada	CA2651367		•
	United States	US11/914107		•

Biological sampling device	World	PCT/AU2010/00071	•
Earliest priority January 27, 2009			

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	Country / region	Numbers	Granted	Pending
RARECELLECT® PROJECT (cont.)				
Epigenetic DNA enrichment	Australia	AU2009905023		•
Earliest priority October 14, 2009	United States	US61/251523		•
Cell processing and/or enrichment methods	Europe	EP097125694		•
Earliest priority February 18, 2008	United States	US12/918015		•
	World	PCT/AU2009/000180		•
Methods for obtaining fetal genetic material	World	PCT/AU2010/000438		•
Earliest priority April 21, 2009				
Methods of enriching and detecting fetal nucleic acids	United States	US61/289710		•
Earliest priority December 23, 2009				
Methods for obtaining samples for forensic analysis	United States	US61/323700		•
Earliest priority April 13, 2010				

Out-licensing our Non-coding Patents Globally

The Company is currently licensing its non-coding patents in the United States, Europe and elsewhere.

This strategy was initiated in late 2000, soon after GeneType AG and its patents were acquired by the Company. The first step in the process was to secure patent insurance, which we achieved in early 2001. This meant that if we were forced to take legal action against infringers, under that policy the cost would be largely covered by our underwriter. This policy has since expired.

Thereafter, we progressively made contact with many companies in the United States and elsewhere, bringing the patents to their attention and indicating how they might benefit from a license to the Company s non-coding patents. In late 2002, we hired a manager to manage the Australian end of the licensing effort and to establish a central database of all prospective licensees, globally.

The plan initially was to grant a limited number of licenses focusing primarily on the up-front fee component, and then to progressively build recurring annuity or royalty component of subsequent licenses. When we identified companies that seemed to be clearly infringing our patents, while also indicating they would not take a license, we put them on formal notice under our patent insurance policy. Overall, the strategy has unfolded as planned.

Our Licenses and Commercial Collaborations

The following section describes our existing commercial and research licenses, our collaborations and our collaborators. We announced our first license to the non-coding patents to the Australian livestock testing firm Genetic Solutions Pty. Ltd., in February 2002. Since then, we have

formed a number of collaborations and granted many additional licenses.

Commercial Licenses and Collaborations:

Agriculture Victoria Services Pty. Ltd.: In February 2002, our subsidiary GeneType Pty. Ltd. entered into a joint venture agreement with Agriculture Victoria Services Pty. Ltd. (AVS) for the formation of the joint venture company AgGenomics Pty. Ltd., to operate a joint venture business in commercial plant genotyping and genomics services. Under the terms of the joint venture agreement, we hold 50.1% of the shares of the joint venture company. We have certain obligations under the joint venture agreement to loan money to the joint venture company, which is not expected to exceed $500,000 at any given time. AVS is not required to provide further funding to the joint venture company. The agreement is terminable by a party in the event of a breach by the other party that is not timely cured or upon the occurrence of an adverse event to the company or to either shareholder. Adverse events are insolvency type events or discontinuation of business. In the event of termination the non-defaulting party can require liquidation of the company or purchase the other party s interest, as it chooses.

Genetic Solutions License: In November 2001, we granted a license to Genetic Solutions Pty. Ltd. who paid us a non-refundable license fee in cash in return for a license to our non-coding analysis and mapping patents. The license can be terminated by either party upon any material breach of any term or condition by the other party which has not been timely cured after notice. We may also terminate the agreement in the event of the bankruptcy of the licensee or discontinuation of their business.

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Sequenom License: In April 2002, we granted a license to bioinstrument maker Sequenom, Inc., who paid us a non-refundable license fee in cash and shares in return for a license to our non-coding analysis and mapping patents. The license can be terminated by either party upon any material breach of any term or condition by the other party which has not been timely cured after notice. We may also terminate the agreement in the event of the bankruptcy of the licensee or discontinuation of their business.

Nanogen License: In April 2002 we granted a license to Nanogen, Inc, of San Diego, USA, who specializes in the development of biochip applications in genetics diagnostics. Nanogen paid us a non-refundable license fee and unlisted warrants in return for a license limited to genetic research and human diagnostics. Specifically, Nanogen receives no rights to the mapping patent nor any applications in animals or plants. Since the date of the initial license, the warrants became in the money and we exercised them, acquiring Nanogen shares which we disposed of in market transactions generating further income. The license can be terminated by either party upon any material breach of any term or condition of the agreement not timely cured. We also can terminate the agreement in the event the licensee becomes involved in insolvency proceedings or if it discontinues its business for any reason.

Perlegen License: In August 2002, we granted a license to US genome researcher, Perlegen Sciences, Inc., which paid a non-refundable combination of cash and securities for an exclusive license limited to a specialized field known as high resolution whole genome analysis . Either party can terminate the license agreement upon any material breach of any term or condition by the other party that is not timely cured after notice. We also have the right to terminate the agreement in the event of insolvency of the licensee or if it discontinues its business for any reason.

Myriad Licenses: In October 2002, we announced a licensing agreement with Myriad Genetics, Inc, under which we granted Myriad broad rights to utilize our non-coding patents, in return for which Myriad agreed to pay us a non-refundable license fee plus future fees on an annual basis in lieu of royalties, plus the rights to bring Myriad s predictive tests to Australia and New Zealand. These tests, which include genetic susceptibility tests for breast cancer, ovarian cancer, bowel cancer, melanoma and cardiac risk are now being offered by the Company in Australia and have resulted in the expansion of our existing genetic testing facilities in Melbourne. The license can be terminated by either party upon material breach by the other party that is not cured within 30 days of notice. We also may terminate if the licensee fails to make any payment required by the agreement. Under the second of two agreements, we are granted a license to use Myriad s diagnostic services in Australia and New Zealand in exchange for an annual fee. We are obligated to use reasonable efforts to commercialize the licensed diagnostic services in Australia and New Zealand. Under the terms of this agreement, we have been granted an option in exchange for upfront payments and a continuing royalty, to expand the license in respect of full sequence testing, which has not been exercised. The term of this agreement extends until 2012. Either party can terminate the agreement upon a material breach not timely cured after notice. In addition, Myriad can terminate if we fail to make any payment required under the agreement.

Pyrosequencing Licenses: In March 2003, we announced a cross-licensing agreement with Pyrosequencing AB, of Sweden (now known as Biotage AB). Pyrosequencing received a broad non-exclusive license to our non-coding DNA analysis and mapping patents but only when used in combination with Pyrosequencing s sequencing by synthesis reagents. In return, we received a non-refundable cash up front payment, plus royalties for the life of the non-coding patents, plus three state-of-the-art analytical instruments (Pyrosequencing systems), plus other IP rights and assays from Pyrosequencing. Either party can terminate the agreement upon material breach that is not timely cured by the other party after notice. In addition, either party can terminate the agreement if the other party becomes involved in insolvency proceedings, or if the other party discontinues its business for any reason.

ARUP License: In April 2003, we announced a license to Associated Regional & University Pathologists (ARUP) of Salt Lake City, Utah. ARUP is a laboratory system owned by the University of Utah, and the first service provider actually performing human genetic testing to take a license from the Company. The license was granted in return for a one-time non-refundable license issue fee. The license is terminable by a party upon material breach by the other party that is not timely cured after notice. In addition, we have the right to terminate if the licensee

becomes involved in an insolvency or discontinues its business for any reason. In May, 2003, we had also granted the University of Utah a separate research license to show our support for their leading genetic research program into the non-coding regions of many genomes. This license is terminable upon material breach by the licensee not timely cured after notice.

Quest License: In August 2003, we granted a license to our non-coding analysis patents to Quest Diagnostics Inc., based in New Jersey, USA. The terms included a non-refundable signing fee plus ongoing annual payments in lieu of royalties from Quest for services provided by it in genetic laboratory testing in the United States, Canada and Mexico. In addition, the license is terminable by one party in the event of a material breach by the other party not cured after notice. Either party may also terminate the license in the event of an insolvency event affecting the other party or the discontinuation of business by the other party. Effective June 1, 2010, we amended the license which had been granted to Quest as part of a settlement with that company. In return for agreeing to the amendment, Quest made a further payment to Genetic Technologies.

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TM Bioscience License: In December 2003, we granted a license to our non-coding analysis and mapping patents to TM Bioscience Corporation of Toronto, Canada. The terms provide for a signing fee plus ongoing annual payments as a non-refundable license fee and an annual royalty on licensed products. This was our first commercial license granted to a Canadian company. TM Bioscience is a leading provider of diagnostic kits for human genetic testing, exported globally. The agreement is terminable by a party upon material breach by the other party that is not timely cured, and may be terminated by us in the event of dissolution or sale of the business of the licensee.

LabCorp License: In February 2004, we granted a license to our non-coding patents to Laboratory Corporation of America Holdings (known as LabCorp), a leading provider of human diagnostic services in the U.S. and Canada. It also performs testing in Europe for other companies, including pharmaceutical companies, for regulatory compliance purposes. The consideration received for the license, which covers both the non-coding analysis and mapping patents, included a non-refundable signing fee plus annual license annuity payments for the life of the patents, through 2015. LabCorp also withdrew a declaratory action in respect of our patents which had been initiated in New Jersey. The license is terminable by either party upon material breach by the other party that is not timely cured. In addition, we are entitled to terminate the agreement in the event that the licensee intentionally and knowingly promotes the licensee s reference testing to third party clinical laboratories for the purpose of circumventing the need for such laboratories to license our patents. The licensee is entitled to terminate the agreement at any time upon 30 days prior written notice (without prejudice to its accrued obligations thereunder) and we can terminate in the event of an insolvency event involving the licensee or discontinuation of its business.

Ovita License: In June 2004, we entered into a license agreement with Ovita Limited of New Zealand, granting them a license to our non-coding patents to the extent required in order to commercialize genetic marker tests and pedigree tests and to conduct research and development activities for new applications of our technology in connection with testing of sheep and cattle. The agreement included the payment of an initial non-refundable research license fee, a non-refundable commercial license fee and a royalty on licensed products made using our patents, payable calculated on gross sales. The license is terminable by a party for material breach that is not cured by the other party, by licensee upon 30 days written notice to us and by either party in the event of discontinuation of its business, an insolvency event or failure to pay amounts due and owing to the other.

Genzyme License: Effective as of September 17, 2004, we granted a license to our non-coding patents to Genzyme Corporation, based in Cambridge, Massachusetts, in order for the licensee to perform preclinical and human research and human genetic testing. The grant of the license was in exchange for a non-refundable license issue fee consisting of a cash component and an in-kind component. The in-kind component consisted of a license agreement in respect of patents owned by Johns Hopkins University and licensed by the licensee. In addition, Genzyme is obligated to pay to us license annuity fees in lieu of a royalty for each year of the term. Either party can terminate the agreement upon material breach not timely cured, in the event of insolvency of the licensee, or by the licensee at any time upon 30 days written notice to us.

MetaMorphix Agreements: In September 2004, we executed two agreements with MetaMorphix, Inc., based in Maryland and specializing in the genetics and genomics of certain animal species, particularly cattle and dogs. Under the first such agreement, we granted a license to use our non-coding patents in order to commercialize applications of diagnostic assays for use in the livestock, aquaculture and companion animal industries. The licensee is obligated to pay us annually increasing license annuity fees in lieu of a royalty, as well as a non-refundable license issue fee. Either party can terminate the agreement upon a material breach not timely cured, or by us upon the licensee s discontinuation of its business for any reason. Under the second license, to which MMI Genomics, Inc. (a subsidiary of MetaMorphix) is also a party, we were granted a license to the licensor s patents and associated know-how in order to perform internal DNA-based diagnostic assays for use in our cattle and canine identity and parentage verification services. We have subsequently paid the licensor a non-refundable license fee. The licensor s obligations include ongoing support for the license and know-how. The agreement is terminable by either party upon material default by the other party that is not timely cured, or by the licensor in the event we discontinue our cattle and canine identity and parentage verification genotyping services business for any reason. The license to our non-coding patents that was previously granted to MetaMorphix was terminated in October 2009 as a result of a material unremedied breach by that company.

ViaLactia License: In September 2003, we reached agreement with ViaLactia Biosciences (NZ) Limited of Auckland, New Zealand regarding the terms of a research and commercial license to the Company s non-coding patents. ViaLactia is a wholly-owned subsidiary of Fonterra, New Zealand s largest dairy cooperative. The license was formally concluded in December 2003. The purpose of the license is to permit ViaLactia to conduct internal research activities and development of applications of our technology in the dairy industry, including new applications concerning dairy cattle, pasture grasses, mice as models for dairy cattle and yeast and bacteria as applied to the dairy industry. The license is terminable by either party upon material default of the other party that is not timely cured, without other penalty.

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C.Y. O Connor ERADE Village Foundation: In October 2003, we announced that we had signed heads of agreement to establish a broad strategic alliance with the C.Y. O Connor ERADE Village Foundation, a leader in biotechnology innovation based in Perth, Western Australia. Definitive documentation was concluded in June 2004. Under the terms of the agreement, we acquired all of the Foundation s patents and other intellectual property in the fields of genetics and genomics, including the Foundation s issued U.S. patent 6383747 and foreign equivalents. This extensive package of intellectual property has created additional opportunities for us in support of licensing and service testing. As part of the arrangement, the Foundation acquired a license to our non-coding patents for a fee, such that the net purchase price for us was settled by the issuance of a total of 16,666,667 of our Ordinary Shares to the Foundation based on a market value of $0.39 per share. The transaction closed in June 2004. Under the arrangement, we support the ongoing genetics and genomics programs of the Foundation. Initially, five projects were selected for priority attention and we will provide $4.5 million to the Foundation, spread over five years, to help fund such research and development of new intellectual property. On July 7, 2004, the Company supplied a letter of credit for $450,000 for the term of the agreement. Under the agreements, we are the primary commercialization vehicle for all new inventions, patents, intellectual property and business opportunities arising at the Foundation in the field of genetics or genomics. We are also obligated to pay royalties to the Foundation on gross revenue derived from the Foundation IP. We may terminate the license following any breach of the license by the licensee, either party can terminate following a material breach that is not timely cured or following an insolvency event of the other party. On June 15, 2009, being the fifth anniversary of the Effective Dates of the various underlying agreements between the Company and the Foundation, the agreements terminated. As a result, the letter of credit for $450,000 which had been supplied by the Company was withdrawn.

Bionomics Licenses: Effective November 5, 2004, we entered into two agreements with Bionomics Limited, a public company based in Adelaide, South Australia. Under the first such agreement, we granted a non-exclusive, royalty-free license to Bionomics to use our non-coding patents in order to (i) perform research and development activities relating to and arising from the identification of genetic factors that may influence epilepsy and (ii) commercialize the results of those research and development activities including, without limitation, epilepsy diagnostic assays. Bionomics paid us a non-refundable license fee on signing. Either party can terminate the agreement upon a material breach not timely cured. Under the second agreement with Bionomics, we were granted a license to use certain intellectual property rights, including patent rights and associated know-how, relating to epilepsy gene discoveries and epilepsy diagnostic assays subject to minimum annual royalties. We paid Bionomics a non-refundable license fee. The agreement is terminable by either party upon material default by the other party that is not timely cured.

Australian Genome Research Facility License: Effective December 31, 2004, we granted a license to the non-coding patents to Australian Genome Research Facility Ltd. (AGRF) pursuant to which AGRF can use the patents on a non-exclusive basis for the purpose of performing genotyping services. The license requires an advance non-refundable license fee and an annual non-refundable annuity for the term of the license in lieu of a royalty, which continues until sooner terminated or the licensee no longer utilizes the patent. The agreement is terminable by mutual agreement, or by us in the event of a breach of a term or condition by the licensee or if it is subject to an insolvency event.

New Zealand Licenses: Effective June 30, 2005, we entered into a license agreement with four commercial parties in New Zealand: AgResearch Limited, The Horticulture and Food Research Institute of New Zealand Limited, New Zealand Forest Research Limited and Livestock Improvement Corporation Limited. Under the terms of the agreement, the parties were granted licenses to our non-coding patents in consideration for which they paid us a non-refundable license issue fee.

Applera Licenses: Effective December 8, 2005, we entered into various agreements with Applera Corporation of Norwalk, Connecticut as part of a settlement of a patent dispute. The binding agreements include a final Settlement Agreement plus license agreements and a supply agreement. The total consideration receivable by us was paid partly in cash and partly in kind - including agreements supplying the Company with certain Applera equipment, reagents and intellectual property rights. Recognition of in-kind consideration as revenue is subject to us meeting certain revenue recognition criteria including, but not limited to, the measurement of fair value at the time of receipt.

Optigen Licenses: Effective May 23, 2006, we executed an agreement with Optigen, LLC of Ithaca, New York. Under the agreement, Genetic Technologies granted Optigen a non-exclusive license to our non-coding patents for applications in dogs, and Optigen granted the Company the exclusive right to offer and perform the complete range of Optigen genetic tests for diseases in dogs in the Asia-Pacific region. The addition of the Optigen tests substantially expanded the range of genetic tests offered by us to the canine industry in our region. The license granted by us to Optigen provides Optigen with access to our non-coding technology, covering all relevant genetic tests and research activities conducted by Optigen, in dogs.

Bovigen License: Effective June 1, 2006, we granted a license to the non-coding patents to Bovigen, LLC of Harahan, Louisiana. Under the agreement, Bovigen will use the Company s non-coding technology to build its business of offering genetic tests to the American livestock industry to determine the presence or absence of certain desirable traits in individual cattle. The rights that we licensed to Bovigen were granted non-exclusively, and are limited to applications in cattle in the USA, Canada and South America. In consideration for granting the license, Bovigen paid us an up-front signing fee and will pay ongoing royalties on the future sales by Bovigen for the life of the non-coding patents.

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Innogenetics Licenses: Effective June 30, 2006, we granted a license to the Company s non-coding patents to Innogenetics NV of Ghent, Belgium. Innogenetics is a significant supplier of genetic testing kits in Europe and is listed on the Belgium and German stock exchanges. In consideration for granting the license, Innogenetics paid us an up-front signing fee and will pay ongoing annuities for the life of the non-coding patents. The agreement is terminable by mutual agreement, or by us in the event of a breach of a term or condition by the licensee or if it is subject to an insolvency event. Effective November 8, 2010, we granted a second license to the Company s non-coding patents to Innogenetics as part of a settlement of a dispute which, this time, covers its work in molecular diagnostics products.

Genosense License: Effective December 1, 2006, we granted a license to the Company s non-coding patents to Genosense Diagnostics GmbH, a leading anti-aging and preventive genetic diagnostics company based in Vienna, Austria. In consideration for granting the license, Genosense paid us an up-front signing fee and will pay ongoing annuities for the life of the non-coding patents. The agreement is terminable by mutual agreement, or by us in the event of a breach of a term or condition by the licensee or if it is subject to an insolvency event.

Sciona License: Effective February 16, 2007, we granted a license to the Company s non-coding patents to Sciona, Inc. based in Boulder, Colorado. This license runs for nine years and is the first step in a progressive co-operation between us and Sciona in relation to the emerging lifestyle and life-extension markets. We received a signing fee plus annual payments from Sciona, increasing with time. We were also granted the right to market the Sciona range of products in the Asia-Pacific region, and to perform the relevant genetic tests at our laboratory in Melbourne. Sciona is a leading provider of personalised genetic tests which focus primarily on lifestyle and nutritional adjustments to enhance health and longevity. The agreement is terminable by mutual agreement, or by us in the event of a breach of a term or condition by the licensee or if it is subject to an insolvency event. During 2009, Sciona was placed into receivership.

Monsanto Licenses: Effective June 20, 2007, we granted a license to the Company s non-coding patents to Monsanto Company, based in St. Louis, Missouri. As part of the license, which covers Monsanto s work in plants, Monsanto made an up-front cash payment which, under the terms of the license, cannot be disclosed. Effective August 22, 2007, we granted a second license to the Company s non-coding patents to Monsanto which, this time, covers its work in swine. In respect of this second license, Monsanto paid us a further up-front payment. Effective July 30, 2010, we granted a third license to the Company s non-coding patents to Monsanto which, this time, covers its work in cattle. In respect of this third license, Monsanto paid us a further up-front payment.

Thermo Fisher Scientific License: Effective June 29, 2007, we granted a license to the Company s non-coding patents to Thermo Fisher Scientific Inc., based in Waltham, Massachusetts. Thermo Fisher is the parent company of Athena Diagnostics, Inc, a genetic testing laboratory based in Worcester, Massachusetts, with whom we had been in discussions for some time. As part of the license, Thermo Fisher made an up-front cash payment which, under the terms of the license, cannot be disclosed.

Syngenta License: Effective September 28, 2007, we granted a license to the Company s non-coding patents to Syngenta Crop Protection AG, based in Basel, Switzerland. Syngenta is a large plant and seed company, active in more than 90 countries, with more than 19,000 employees. As part of the license, Syngenta made an up-front cash payment which, under the terms of the license, cannot be disclosed.

BioSearch License: Effective September 30, 2007, we granted a license to the Company s non-coding patents to BioSearch Technologies Inc., based in Novato, California. As part of the license, pursuant to which BioSearch is permitted to distribute certain DNA structures, known as oligos or probes, to end users worldwide for research purposes only, BioSearch made an up-front cash payment which, under the terms of the license, cannot be disclosed.

Kimball License: Effective November 16, 2007, we granted a license to the Company s non-coding patents to Kimball Genetics Inc., based in Denver, Colorado. As part of the license, Kimball made an up-front cash payment which, under the terms of the license, cannot be disclosed.

Prometheus License: Effective December 23, 2007, we granted a license to the Company s non-coding patents to Prometheus Laboratories Inc., based in San Diego, California. As part of the license, Prometheus made an up-front cash payment which, under the terms of the license, cannot be disclosed.

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GE Settlement and License: Effective January 14, 2008, we executed a Settlement and License Agreement with General Electric Company (and indirectly its subsidiary GE Healthcare Bio-Sciences Corp.), based in Piscataway, New Jersey. GE Healthcare is a unit of General Electric Company that employs more than 46,000 people and which, in 2006, generated revenues of USD 17 billion from serving healthcare professionals and their patients in more than 100 countries around the world. The agreement between the Company and GE Healthcare involves a settlement of all disputes between the parties and the granting of a license to GTG s non-coding patents. As part of the agreement, GE Healthcare made an up-front cash payment which, under the terms of the agreement, cannot be disclosed.

GeneDx License: Effective October 1, 2008, we granted a license to the Company s non-coding patents to GeneDx, a subsidiary of Bio Reference Laboratories Inc., based in Gaithersburg, Maryland. The license granted permits GeneDx to perform PTEN testing until the patent expires in March 2010. As part of the license, GeneDx made an up-front cash payment which, under the terms of the agreement, cannot be disclosed.

Millennium License: Effective October 22, 2008, we granted a license to the Company s non-coding patents to Millennium Pharmaceuticals Inc., based in Cambridge, Massachusetts. As part of the license, Millennium made an up-front cash payment which, under the terms of the agreement, cannot be disclosed.

TIB MOLBIOL License: Effective December 8, 2008, we granted a license to the Company s non-coding patents to TIB MOLBIOL Syntheselabor GmbH, based in Berlin, Germany. As part of the license, TIB MOLBIOL made an up-front cash payment which, under the terms of the agreement, cannot be disclosed.

Gen-Probe License: Effective April 29, 2010, we granted a license to the Company s non-coding patents as part of a settlement agreement to Gen-Probe Inc., based in San Diego, California. As part of the license, Gen-Probe made an up-front cash payment which, under the terms of the agreement, cannot be disclosed.

EraGen License: Effective April 30, 2010, we granted a license to the Company s non-coding patents as part of a settlement agreement to EraGen Biosciences Inc., based in Madison, Wisconsin. As part of the license, EraGen made an up-front cash payment which, under the terms of the agreement, cannot be disclosed.

Molecular Pathology License: Effective June 18, 2010, we granted a license to the Company s non-coding patents as part of a settlement agreement to Molecular Pathology Laboratory Network Inc., based in Maryville, Tennessee. As part of the license, Molecular Pathology made an up-front cash payment which, under the terms of the agreement, cannot be disclosed.

Beckman Coulter / Clinical Data License: Effective August 24, 2010, we granted a license to the Company s non-coding patents as part of a settlement agreement to Beckman Coulter Inc. and Clinical Data Inc., based in Brea, California and Newton, Massachusetts, respectively. As part of the license, both parties made an up-front cash payment which, under the terms of the agreement, cannot be disclosed.

Interleukin License: Effective October 1, 2010, we granted a license to the Company s non-coding patents as part of a settlement agreement to Interleukin Genetics Inc., based in Waltham, Massachusetts. As part of the license, Interleukin made an up-front cash payment and is due to make one further cash payment in 2011 both of which, under the terms of the agreement, cannot be disclosed.

Laboratoires Réunis License: Effective October 20, 2010, we granted a license to the Company s non-coding patents as part of a settlement agreement to Laboratoires Réunis, based in Junglinster, Luxembourg. As part of the license, Laboratoires Réunis made an up-front cash payment together with a number of subsequent instalment payments which, under the terms of the agreement, cannot be disclosed.

Pioneer Hi-Bred License: Effective November 29, 2010, we granted a license to the Company s non-coding patents as part of a settlement agreement to Pioneer Hi-Bred International Inc., a DuPont corporation based in Johnston, Iowa. As part of the license, Pioneer made an up-front cash payment which, under the terms of the agreement, cannot be disclosed.

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Research Licenses and Collaborations

University of Melbourne collaboration: On January 22, 2003, we entered into a collaborative research agreement with the University of Melbourne, Australia, concerning the so-called ARC Linkage Project : toward novel approaches for the control of parasitic nematodes via genomics/phenomics. This agreement sets forth the terms of the collaboration between GeneType Pty. Ltd. and the university for research under an Australian government Research Council Linkage Project. Under the terms of this agreement, GeneType Pty. Ltd. is obligated to use its best efforts to provide additional funds for the project to make up the projected shortfall as contemplated by the original proposal, over a term of three years.

University of Utah License: On April 30, 2003, we granted a research license to the University of Utah, in Salt Lake City, Utah. This is a royalty-free license to permit the University to conduct research in exchange for a nominal fee.

Horticulture Australia Limited collaboration: On June 18, 2003, AgGenomics Pty. Ltd., a subsidiary of the Company, entered into a three-year Collaborative Research Agreement with Horticulture Australia Limited (HAL) to try and identify a genetic trait for day/night neutrality in strawberries which, if found, could lead to an extension of the cultivation season and consequently higher production. The research program, costing approximately $2.1 million, is funded by HAL as to 45% and AgGenomics as to 55%. Any and all intellectual property generated from the project will be owned in the same proportions. This initial agreement was concluded in June 2006, following which it was agreed that it be extended for a period of a further three years at a total cost of $2.1 million, to be funded 42.03% by HAL and 57.97% by AgGenomics. Once again, any and all intellectual property generated from the project will be owned in the same proportions. In 2010, work will commence to investigate the possible commercial application of the research.

University of Sydney License: In July 2003, we granted a research license to the University of Sydney, in Australia. We subsequently entered into a further agreement (dated September 4, 2003) with the University of Sydney pursuant to which we received the exclusive right to commercialize a new and potentially significant genetic invention made by a professor in the Neurogenetics Research Unit and the University s Faculty of Medicine. This Australian invention is intended to permit an improved understanding of the genetic factors underlying superior athletic and sports performance, based on the presence or absence of the ACTN3 gene. Under the terms of this agreement, we made an upfront payment, agreed to pay a royalty on net sales of the invention by us and a fee on first grant of a patent for the invention or any patent rights in any country and a further payment of part of any consideration of whatever kind received by us under a license of the assigned intellectual property.

King s College License: In December 2003, we granted a license to our non-coding patents to King s College, London, in the United Kingdom. Under the terms of the license, King s College will be able to apply the non-coding patents to its internal research programs. The license is terminable by either party upon any material breach not timely cured, without penalty. King s College is considered a leader in the field of researching the genetic basis of various psychiatric and psychological disorders, including schizophrenia, anxiety / depression and certain attention deficit disorders. Future commercial applications arising from research at King s College would require an additional commercial license from us. In March 2004, we initiated a joint research project in the United Kingdom to explore the functionality of certain non-coding DNA elements, initially with special focus on the genetics of breast cancer susceptibility and the genetics of certain neuro-psychiatric conditions, such as schizophrenia. The project was funded by us for a further period of six months, in an amount of GBP53,000 that was paid in two instalments. In May 2005, we extended the project for the period from June 1, 2005 to December 31, 2005 and agreed to fund the costs incurred by King s College during that period up to a maximum amount of GBP51,360. In February, 2006, the Company agreed to further extend its research agreement with King s College for the period from February 1, 2006 to August 31, 2006 and agreed to fund the costs incurred by King s College during that period up to a maximum amount of GBP63,700. This project has now been terminated.

University of Technology License: Effective December 23, 2003, we granted a research license to the University of Technology, Sydney, to permit the University to conduct internal research activities to research, identify, map and develop tests for genetic markers and genes of interest. Either party has the right to terminate the agreement upon the occurrence of a material breach that is not timely cured, without other penalty.

Colorado State University License: Effective May 14, 2004, we granted a research license to the Colorado State University. This is a royalty-free license to permit the University to conduct research in exchange for a nominal fee.

Texas A&M University License: Effective February 7, 2007, we granted a research license to Merlogen LLC, a company associated with Texas A&M University. As part of the license, we received a nominal fee and received rights to use certain technologies in the field of animal genetics.

In addition to the above agreements, we continue to negotiate licensing terms to grant licenses to our non-coding patents to many companies, large and small, and also to government and private institutes, in many countries. To facilitate these negotiations, we have established a database of all prospective licensees, who we believe would benefit from a license to our non-coding patents.

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Given the large number of potential licensees, the Company decided to expand its licensing program during 2006 by applying additional resources in this area. As a result, the licensing team at the Company s headquarters in Melbourne, Australia was expanded by the appointment of additional staff to accelerate the preparation of dossiers on potential licensees whilst, internationally, independent licensing contractors were engaged to represent the Company on the ground , in our major markets.

In an effort to further stimulate the Company s licensing program, the Company announced on February 16, 2010 that it had filed a patent infringement suit in respect of its non-coding DNA technologies against nine parties in the U.S. District Court, Western District of Wisconsin. The case is being prosecuted by the Company s Colorado-based law firm Sheridan Ross PC and Genetic Technologies has put in place arrangements pursuant to which it believes that the patent infringement suit should not have a material adverse impact on its finances. Since filing the suit, non-coding licenses have been granted by the Company to Gen-Probe Inc., Molecular Pathology Laboratory Network Inc., Monsanto Company, Beckman Coulter Inc. / Clinical Data Inc., Interleukin Genetics Inc. and Pioneer Hi-Bred International Inc. as part of settlements that have been reached with those parties. Further, settlement discussions with the remaining three parties, together with other parties who are not involved with the suit the majority of which are located in Europe, have also commenced and are progressing.

Our Support for Three Significant Research Projects

Genetic Technologies currently supports three major research programs, details of which have been provided below. Some projects have arisen from new inventions made by the Company while some have been made by others who have approached the Company seeking collaboration and support for their activities.

By its very nature, research is unpredictable and involves a considerable element of risk. Such risks may relate to scientific concepts, the implementation of the science, the protection of any inventions made and the success or otherwise in persuading others to respect the intellectual property acquired or created by the Company.

Specifically, patents filed may not issue or may later be challenged by others. Even if patents issue, the methods described may, with time, be superseded by alternative methods which may prove to be commercially more attractive. Even if patents issue and the methods developed are successfully reduced to practice and can be shown to be commercially relevant, there is still no assurance that other parties will respect the patents or will take licenses to use the intellectual property. In such circumstances, it is possible that legal action will be necessary to enforce the Company s rights. Such action, in turn, raises a new series of risks including potentially significant legal costs and uncertain outcomes.

To the extent that delays are encountered in concluding the research projects, additional costs may be incurred. Further, the projected revenues from the projects may also be deferred, potentially impacting on the Company s liquidity. In such cases, the Company may seek to partner with outside parties, who will contribute to the costs of research in return for an interest in the project, or the Company may seek to raise additional working capital from the Market. In a worst case scenario, if the Company s research projects do not achieve their scientific objectives, the projects may well be closed down with no valuable intellectual property having been created.

(1) RareCellectTM Project

In March 2001, the Company began to develop and commercialize patents held by GeneType AG, a subsidiary of Genetic Technologies, relating to the recovery of fetal cells circulating in the peripheral blood of a pregnant woman. These patents, with an earliest priority date of March 27, 1990, have been granted or allowed in most countries where filed, including the United States, United Kingdom, France, Germany, Australia and Japan.

It has long been generally recognized that a simple, universally applicable, non-invasive means of obtaining fetal cells for prenatal diagnosis would represent a major advance over existing practice and would be widely adopted throughout the developed world. As part of the RareCellectTM project, the Company has designed and tested a proprietary sampling device that can safely and reliably collect fetal material from the cervix, and has combined this with a proprietary processing technology that selectively delivers either cellular material or DNA from the fetus which is suitable for analysis to identify genetic disorders using currently available diagnostic technologies.

From its inception, the RareCellectTM project was focused on the recovery and isolation of fetal cells from peripheral blood samples of pregnant women. However, the project subsequently abandoned this approach in favour of focusing solely on the recovery and isolation of fetal DNA from cervical mucus samples.

The Company is now actively pursuing out-licensing/co-development partnering options for the RareCellect Project.

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Background and unmet need

Genetic disorders account for a significant health burden across the world, with over 330,000 children born with congenital malformations annually in the US, Europe and Japan. In addition, between 20% and 30% of post-natal deaths are due to such congenital malformations. In the developed world, it is increasingly common for women to have babies later in life (25% of these births are born to women over 35 years of age), and this can significantly increase the risk of genetic disorders in their offspring.

Current pre-natal testing involves non-invasive screening and invasive diagnostic testing. Screening uses ultrasound of the fetus and maternal serum testing and can be performed from 11 to 13 weeks of pregnancy. Although safe, these tests are not reliable, with a detection rate of 80% (20% of abnormalities are not detected), and a false positive rate of 5% (women with healthy babies being subjected to unnecessary invasive testing).

Diagnostic testing requires the removal of fetal material using chorionic villus sampling (from 11 to 14 weeks) or amniocentesis (from 15 to 20 weeks). Each of these surgical procedures involves the insertion of a needle into the uterus to obtain cellular material from the fetus which can then be tested for abnormalities using a variety of tests. Although accurate, these tests are invasive and carry a significant risk to both the fetus and the mother. Miscarriage rates, which can be as high as 5%, are dependent on the skill of the operator and the gestation age. Furthermore, testing is limited to high-risk patients including women over the age of 35 and results may take as long as two weeks to obtain.

The Company now believes that there is a clear unmet need in pre-natal testing for risk-free (for both mother and fetus) chromosomal/genetic testing for the fetus at as early as eight weeks gestation.

The RareCellect solution

The Company has developed a proprietary sampling device using materials and design features which will ensure safe, non-traumatic sampling of the optimal region of the cervix to yield fetal cellular material. The current design, which has been used by a number of healthcare professionals to sample fetal material from more than 400 women, is protected by a US provisional patent.

The Company has also identified issues relating to the processing of fetal material that limit its utility for subsequent testing, including contamination from maternal cells, sperm cells and other DNA. Genetic Technologies has developed processing methods, which are also covered by provisional patents, that can deliver fetal cells or DNA in a form suitable for testing using any of the currently approved diagnostic methodologies.

Commercial opportunity

The Company believes that RareCellect offers a unique opportunity to successfully penetrate the $2 billion global pre-natal testing market, with the potential for market launch within three to five years. By offering a safe sampling and processing methodology that provides sufficient fetal material for subsequent analysis, it has the potential to displace currently available maternal screening tests and to avoid the need for most of the current invasive diagnostic procedures.

A comprehensive memorandum detailing technical aspects of the technology and the commercial potential of the project has been compiled as has a virtual data room containing a full data package on the project.. As detailed above, a number of international parties who operate in the RareCellect space have now been identified with a view to partnering the project by way of out-license or co-development arrangement on reasonable commercial terms.

Markets and competition: There are some four million pregnancies per year in the United States alone. It is already the case that some form of antenatal screening is provided for most pregnancies in developed countries. The trend towards increasing numbers of women becoming pregnant later in life is resulting in an increasing risk of chromosomal aberrations in these pregnancies. Given the expense, inconvenience and inaccuracy of current screening strategies, and the risks associated with subsequent invasive diagnostic procedures, it seems probable that a reliable, accurate, non-invasive, and relatively inexpensive diagnostic test would be rapidly adopted and applied in all pregnancies early in the pregnancy which would substantially increase the current markets. This conclusion has, of course, been reached by a number of other parties. There are currently several competing groups actively pursuing different methods for the isolation of fetal DNA from maternal blood.

Government regulation: The provision of clinical testing services and in vitro diagnostic medical devices is subject to extensive regulatory requirements in most developed countries. In the United States, the Centers for Medicare & Medicaid Services (CMS) regulates all laboratory testing (except research) performed on humans in the United States through the Clinical Laboratory Improvement Amendments (CLIA). The Food and Drug Administration (FDA) regulates clinical trials and medical devices. In Australia, the regulation of clinical trials and medical devices is performed by the Therapeutic Goods Administration (TGA). Accreditation of laboratories offering pathology services is granted by the Health Insurance Commission, based on a report of assessment by the National Association of Testing Authorities, Australia (NATA). In addition, in the State of Victoria, where the Company has its headquarters, accreditation may also be obtained from the Pathology Services Accreditation Board, again subject to favorable assessment by NATA.

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(2) ImmunAid Project

ImmunAid Pty. Ltd. was established in March 2001 to develop and exploit the ImmunAid technology. Genetic Technologies currently owns 70.5% of ImmunAid with the balance of shares owned by private investors including the inventors of the ImmunAid technology.

The ImmunAid technology describes a method of leveraging a patient s immune system to potentially improve the efficacy of treatments for cancer, autoimmune and infectious diseases. The method builds on a discovery that the human immune system oscillates under chronic disease load. This oscillation has been observed across a range of cancer types and other chronic disease conditions (HIV, MS) and can be elucidated by serial measurements of acute phase inflammatory markers such as C-reactive protein (CRP) and other cytokines and antigen markers. The central hypothesis underlying ImmunAid is that timing the administration of treatment to a prescribed point on patient s immune oscillation will increase the efficacy of the treatment.

Targeting the immune system

The research undertaken as part of the ImmunAid project has discovered a phenomenon of the immune cycle which shows that the immune system switches itself on and off in a continuous and repetitive cycle in patients with chronic diseases such as cancer and HIV.

A critical insight made by the inventor behind the ImmunAid research is that the timing of the administration of chemotherapy may determine a patient s response.

In cancer, the off switch is controlled by a group of cells called T-Regulatory cells which can be manipulated by the accurate and skilful timing of chemotherapy. Once unleashed, the immune system is then free to attack the cancer. In the relatively-rare 7% of cases where chemotherapy is completely effective and cancer is eliminated, the ImmunAid researchers believe that chemotherapy may actually be having a greater effect on the immune system than on the cancer. This is a major paradigm shift in the fields of cancer treatment and immunology.

At the recent American Society of Clinical Oncology conference held in Orlando, Florida, investigators at the Mayo Clinic in Rochester, Minnesota reported the results of a pilot trial they conducted entitled Possible therapeutic reversal of immune suppression in patients with metastatic melanoma by timed delivery of temozolomide chemotherapy . This pilot study, co-designed by the ImmunAid team, used ImmunAid s concept for timed intervention with chemotherapy. It has since provided sufficient preliminary supportive human data to warrant a larger definitive study.

Commercial opportunity

With encouraging technical results having now been obtained from various clinical studies, including that undertaken at the Mayo Clinic, Genetic Technologies has decided to invite expressions of interest from third parties capable of participating to expedite the development and potential commercialization of the ImmunAid technology. A number of potential commercialization partners have since been identified and contacted. Recently, the Company has engaged a recognized international Contract Research Organization to assist it in scoping definitive trials and paths to market for ImmunAid.

(3) Nematode Project (formerly reported as the Pathogens Program)

In March 2001, GTG entered into a Collaborative Research Agreement (CRA) with the University of Melbourne (Department of Veterinary Science) to conduct applied research on methods for the diagnosis and control of parasitic diseases in animals and humans. Two scientists were employed via the University and work commenced in mid-2001 under the direction of Associate Professor Robin Gasser. Prof. Gasser is the author of more than 120 papers in international peer-reviewed journals, mainly in classical and molecular parasitology.

A substantial portion of the costs associated with this project are paid for by interested third parties, including relevant industry bodies such as Meat and Livestock Australia (MLA) and the Australian Research Council (ARC). A summary of the project s development costs, outcomes and further plans is summarized below:

Project 1 (undertaken between April 2001 and March 2003) - *Cryptosporidium parvum*

Total estimated costs paid by the Company: $400,000

Gasser *et al* developed a new, DNA-based test to identify and sub-type *Cryptosporidium* species and sub-species. Independent validation of sensitivity and specificity was conducted by Robin Gasser and Rachel Chalmers (PHLS *Cryptosporidium* Reference Unit, Swansea, UK) post our funding. Collectively, the Company and Gasser have transferred the test from gels to capillary instruments. Following a review of potential markets, GTG decided to terminate the project.

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Project 2 - Novel methods for the control of the major worm parasites of sheep and cattle including *Haemonchus contortus, Trichostrongylus vitrinus* and *Ostertagia ostertagi.*

The project s objective is to discover and develop novel compounds for the control of nematodes (principally *Haemonchus contortus* - the barber s pole worm) in sheep. Parasites that affect livestock are a major cause of disease globally and the financial losses they cause are substantial. Infestation of sheep and cattle with parasites is estimated to cost Australian producers approximately $1 billion annually. To make matters worse, these parasites have grown resistant to the drugs that are commonly used to treat them. Left unattended, parasitic worms infest the gut of livestock, reducing their growth and leading to lower productivity and quality of wool. Farmers typically control parasitic worms by drenching, but the efficacy of current treatments is becoming progressively less due to the development of resistance. This trend is likely to get worse, so there is a major global drive to develop novel means to control parasites.

This project is a collection of collaborative research projects involving Genetic Technologies Limited and:

- Professor Robin Gasser s group in the Department of Veterinary Science, University of Melbourne;
- Associate Professor Adam McClusky s group in the Department of Chemistry, University of Newcastle;
- Meat and Livestock Australia (MLA).

Professor Gasser s group is working on target identification by investigating the genome of parasites, target validation, assay development and compound screening. Professor McClusky s group is working on synthesis of compounds directed against the targets identified by Professor Gasser s group.

Funding is provided by two ARC Linkage grants supplemented by direct and in-kind contributions from the Company and MLA. The Company s total cash commitment under ARC Linkage Project LP0667795 is $250,000 per year for three years ended June 30, 2009. The Company has a further commitment under ARC Linkage Project LP0882285 of $90,000 per year for the three years ending December 2010. Project IP ownership is split between the Company (as to 75%) and MLA (as to 25%).

During 2008, it became apparent that the methods previously used to screen compounds synthesized by the University of Newcastle were flawed. Consequently, an industry standard larvae development assay (LDA) was designed and implemented by the University of Melbourne. All compounds previously synthesized either have been or are planned to be re-screened with the LDA. Initial results from the re-screening have identified two lead compounds exhibiting highly promising nematocidal performance.

During 2009, the Company s collaboration with the researchers at the Universities of Melbourne and Newcastle to discover new classes of chemicals for the treatment of nematodes (worms) in livestock continued. The project was supported by a grant from Meat & Livestock Australia who actively participated in the project.

In the first phase of the project, genetic techniques were used to identify proteins essential for the survival of the nematodes. Several such targets were prioritized and their DNA sequences have been compared with that of humans and sheep. The logic behind this approach is that the protein targets in the parasites that have the least similarity with man or the host will be safer and less environmentally dangerous.

Several compounds have now been successfully synthesized as part of the project and a number of major livestock pharmaceutical companies active in the field of animal health, and several smaller companies with an interest in animal parasitology have been approached to determine their interest in this project. The discussions are continuing.

(4) Sponsored Research Agreement with C.Y. O Connor

In June 2004, we entered into a series of agreements with the C.Y. O Connor ERADE Village Foundation, incorporating the Immunogenetics Research Foundation and the Institute of Molecular Genetics and Immunology (CYO and the Foundation) under which (i) we acquired CYO s entire patent estate in the field of genetics and genomics, known collectively as the Genomic Matching Technique (GMT) (ii) we granted a license to CYO to utilize our non-coding patents, and (iii) we agreed to provide research funding to the Foundation for a period of five years ending June 2009 to develop novel, high-value genetic tests for commercialization by GTG.

The program was formed upon the acquisition by the Company of all the genetics and genomics intellectual property generated by the Foundation, which showed promise in a number of important areas, including improved tissue typing and transplantation techniques in human bone marrow transplantation, plus an extensive range of new opportunities in the field of human genetics and animal genetics, including cattle, horses, dogs and fish. The Company has certain rights to any and all intellectual property generated by the Foundation as part of the agreement between the parties.

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It is becoming increasingly apparent that the traditional genetic tests which have been developed to diagnose individuals susceptible to diseases, or identify plants or animals that have desirable characteristics, provide limited information. As such, the Company is working closely with the Foundation to develop a novel approach designed to overcome these shortcomings. The GMT developed by CYO, is an effective, yet relatively simple, method for identifying genetic differences between individuals. A large number of GMT clusters have now been identified which are being associated with genes that may be implicated with diseases.

One such potential disease association has been discovered with Age-related Macular Degeneration (AMD), an inflammatory disease of the eye which often results in blindness in the aged. A proportion of patients diagnosed with the milder form of the disease develop to the more-advanced form which results in blindness. GMT may be used to effectively identify those susceptible to disease progression, enabling early intervention with therapy. This approach can potentially delay the onset of the disease, or reduce its severity. A study was undertaken during 2006/07 by the Company into the utility of the application of GMT to AMD. Upon completion of this study, the Company decided to terminate its support of this project.

In the area of tissue and marrow transplantation, CYO and independent laboratories have shown that transplant recipients who were matched to donors using the traditional immune markers and by GMT had a substantially increased chance of long term survival compared with patients matched for the immune markers alone. This data demonstrates that the GMT is revealing information about the haplotype of the individuals as it applies to transplantation that is over and above that provided by traditional immunological typing. This principle can be extended to a range of similar disorders.

CYO is currently in the process of investigating various applications of the GMT technology as they relate to immune-related diseases, including autoimmune diseases. These include the early identification of people who are susceptible to disorders such as Type I diabetes, multiple sclerosis, lupus and rheumatoid arthritis, thereby increasing their lifespan and quality of life by delaying the onset of disease, reducing the severity of disease or potentially eliminating the disease altogether. Research is also being undertaken by CYO investigating whether this principle can be extended to diseases outside the immune system, including diseases and desirable traits of plants and animals. The tests are rapid, inexpensive, can be performed on standard equipment and provide more information than regular genetic tests.

Impairment of patents

During the 2007 financial year, in conjunction with work performed by an independent valuation expert, an impairment charge of $1,150,000 was calculated by Management and recorded against the carrying value of the patents that were originally acquired from the Foundation. The recoverable amount of the patents was based on value-in-use calculations. The estimated risk adjusted cashflows were discounted by the risk free rate of 6.5%. The 2007 financial year was the first year in which an indicator of impairment had arisen, requiring an assessment of the recoverable amount of the patents.

During the 2008 financial year, following a detailed scientific review of the work that had been undertaken in respect of one of the applications of the underlying technology, a second impairment charge was made. This charge resulted from a lack of progress with the research related to the commercialisation of certain applications of the technology covered by the patents and it was subsequently decided to terminate that aspect of the program. Whilst work continues in respect of the use of the technology in relation to other related areas, the lack of progress made as at balance date in relation to GMT and AMD gave rise to an impairment charge of $2,378,000 during the year ended June 30, 2008.

Given that the Company s previous attempts to commercialize the technology associated with the patents had not delivered the anticipated revenues, the Company believed that it was appropriate to base its assessment of the carrying value of the underlying patents as at June 30, 2008 around a further product based on the technology which had already been successfully completed and from the sale of which revenues had already been generated. Accordingly, the carrying value of the underlying patents as at June 30, 2008 had been based on the anticipated net cash flows that the Company believed would be generated from the future sales of this product.

The cashflow forecasts associated with the impairment assessment of the patents have been projected to 2012, being the first year in which the respective patents will expire, using the Company s estimated weighted average cost of capital and conservative projections of anticipated sales volumes over the next three years. Further, given the competitive advantage afforded to the Company in respect of this product, a termination value has also been included to reflect that sales of the product are expected to continue beyond the date of the patent expiry. The forecasts and associated recoverable amount has been determined by Management taking into account the sales that have been generated to date and the considerable interest arising from pre-launch market analysis. Based on the sales of the products achieved during the year ended June 30, 2009 and the continued amortization of the patents, no further impairment charges were raised during that year in respect of the underlying patents.

On June 15, 2009, contract research undertaken at CYO in Perth, Western Australia ceased, following the expiry of the Sponsored Research Agreement between the Company and CYO. Investigations into opportunities for the possible commercialization of the technology developed as part of that research continue.

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Competition

Licensing

Our licensing business principally covers two families of non-coding patents. As we are the sole owners of these patents there is, by definition, no direct competition in this activity. However, to some degree, there are alternate technologies in the market place which can be used to perform genetic analysis and genomic mapping and so in this regard we do face indirect competition and a potential risk of technological obsolescence. A risk of patent invalidation always exists with the possibility of the discovery of previously unknown prior art as well as patent re-examination.

During the year ended June 30, 2009, we successfully prevailed in legal proceedings with respect to a Nullity Action in the German Patent Court regarding the equivalent to US Patent No. 5,612,179 and we have responded to questions raised by the US Patents and Trademarks Office in relation to a Request for Re-examination of seven of the thirty six claims contained in US Patent No. 5,612,179. Apart from these risks, the inevitable expiry of our non-coding family of patents in 2010 and 2015 remains, at which time our ability to generate future license revenues from these particular patents may be restricted. It is anticipated that, over time, however, licensing of additional patents filed by the Company in other areas of genetics and our other research projects may replace revenues currently generated from the licensing of these non-coding patents.

On May 10, 2010, we announced that we had received formal notification from the United States Patent and Trademarks Office (USPTO) that the USPTO had upheld, without amendment, all of the claims which formed the basis of the re-examination action of the Company s core 5,612,179 non-coding deoxyribonucleic acid (DNA) patent (as detailed in our ASX announcement dated June 30, 2009).

Genetic testing - paternity

The size of the Australian DNA paternity testing market can only be estimated, as the tests fall outside of the Australian public health (Medicare) regime and hence no central records are kept. Our best estimate is that the total size of the market is about 5,000 to 6,000 tests per year which, if correct, would give the Company approximately a 50 percent total market share. There are presently a number of other laboratories that offer these tests in Australia, all of which are NATA accredited.

Sonic and Healthscope are the two largest pathology companies in Australia. Throughout Australia, Healthscope refers exclusively to DNALabs. In Victoria, New South Wales and Western Australia, Sonic refer exclusively to their own laboratories. The Australian market for paternity testing is now saturated and, since the entry of two of the three major pathology companies in the later part of 2003, our ability to generate growing revenues from this market has reduced. At present, our market share appears to have stabilized.

Other competitors in this marketplace include: DNAlabs (a wholly-owned subsidiary of Sydney IVF), Sonic Health Care (a division of Sonic, the second largest pathology provider in Australia), Healthscope - formerly Gribbles (the third largest pathology provider in Australia), Victorian Institute of Forensic Medicine (this is the Coroner s laboratory in Victoria), John Tonge Centre (this is the Coroner s laboratory in Queensland), Medvet Science (owned by the South Australian State Government), DNA Solutions (which sells its services over the internet) and

DNA-Bioscience.

Genetic testing - diagnostics

As the sole licensee in Australia and New Zealand for the genetic test for the predisposition for familial breast cancer, we do not have any commercial competitors in this area but Healthscope also supply genetic tests to the healthcare market. In the public arena, tests are provided by the pathology departments of certain public hospitals. They are not true competitors in that the numbers of such tests that can be performed is restricted due to limited Government funding, but they do constitute the majority of tests conducted in this field. State Health Departments fund tests for the public sector based on various criteria and skewed to the most at risk profiles.

Genetic testing - forensics

Forensic DNA testing is defined to include DNA tests, the results of which can be relied upon as evidence in a court of law. To meet the strict standards of court evidence, forensic testing can only be conducted through NATA accredited laboratories that have been approved for such work. We are the first non-government owned, NATA accredited forensics laboratory in Australia. At the moment, virtually all forensic testing is conducted through state government owned laboratories. These laboratories have substantial backlogs and do not generally undertake private DNA forensic tests. As such, we are one of a few accredited laboratory currently providing forensic testing services to the public. To resolve the backlog problem, various state governments have already suggested that they plan to investigate the possibility of outsourcing the testing of forensic samples to the private sector. In January 2008, the Company announced that it had been awarded a three year contract to supply New South Wales Police with DNA analysis services.

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Genetic testing - animals

GTG offers a DNA testing service across a number of animal species, particularly with respect to establishing an animal s pedigree and parentage. This test is common across animal species and is not proprietary. Accordingly, any laboratory that can provide a DNA parentage / pedigree test is able to enter this market.

GTG has also developed a large portfolio of genetic tests for the canine area. Currently, GTG is the only provider of canine DNA services for the growing pedigree dog market in China. Tests are also sold by the Company in various parts of Asia including Japan and the Philippines.

Some major pathology companies in Australia already have vet pathology businesses and almost all have expertise in human DNA profiling. We anticipate that they may enter the animal testing market in the medium term. Currently, the major canine pathology company in Australia has a relationship with GTG whereby it sends all of its canine genetic testing to GTG.

Genetic testing - plants

There are no material levels of commercial DNA service tests conducted in Australia for plants, other than commissioned research conducted by public authorities (such as universities and CSIRO) or by commercial organizations that internally conduct DNA tests as part of the ordinary course of their operations. In recognition of this, we established AgGenomics Pty. Ltd., a joint venture between Genetic Technologies and the Victorian State Government. The joint venture is controlled by Genetic Technologies (owning 50.1%). The commercial goal of AgGenomics is to offer the following services to plant breeders and researchers:

- High throughput extraction of plasmid DNA and genomic DNA;
- High throughput DNA sequencing;
- High throughput genotyping; and
- SNP discovery and analysis.

AgGenomics has focused on the commercial species of greatest value to the Australian economy and also species where the most substantial funding has been invested, including wheat, barley, canola, cotton, vegetable brassicas (e.g. cabbage, cauliflower, brussel sprouts and broccoli)

and wine grapes. To date, AgGenomics has completed a number of commercial projects on behalf of some of these industries.

In Australia, we have two major competitors. The first is Southern Cross University, which specializes in tropical fruits and rice but, as they are highly specialized and do not match AgGenomics testing capacity, they are not seen as a major threat. The second, South Australian Research & Development Institute (SARDI), is seen as our major threat as in the next few years there is a reasonable expectation that they will have the capacity to match AgGenomics.

Whilst we have few domestic competitors, our major commercial threat comes from offshore laboratories based in the United States, England and Korea which have a higher throughput than AgGenomics and enjoy greater economies of scale, thereby reducing their costs. To date, a few large Australian plant sequencing contracts have been lost offshore in cases where the client simply requires the return of the genetic data and does not require our expertise in its interpretation.

Genetic testing - athletic performance

The Company has been granted patents in India, Japan, Australia and New Zealand over genotyping of the ACTN3 gene for athletic performance. Patents are pending in the United States, Europe, China, Canada, Russia and South Korea. Recently, ACTN3 has been offered by the United States based lifestyle genetics company 23andMe Inc., as part of its overall product involving the analysis of more than 500,000 genetic variations. While the ACTN3 SportsGene Test provides an indication of an individual s predisposition to sports/power sport performance as opposed to endurance sport performance, there are a range of other tests, genetic and non genetic that may also indicate a predisposition to particular sporting performance. None of these, however, specifically relate to a genetic test on the ACTN3 gene which, scientifically, has shown a very high correlation to sports performance.

GTG has distribution agreements in place for Europe, parts of Asia and the USA where tests are collected and processed in the GTG laboratory, where as the arrangement for Japan to via a Japanese based laboratory.

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Research

RareCellect Project

Whilst a number of companies around the world are active in the area of prenatal testing, there are currently no commercially available products that compete directly with the RareCellect cervical sampling technology.

ImmunAid Project

Although a number of major research groups around the world are working on immune-based therapeutics for cancer, apart from the joint ImmunAid / Mayo Clinic abstract presented at the American Society of Clinical Oncology (ASCO) 2009 and the Mayo Clinic abstract presented in 2010, there are no commercially-available products relating to the immune cycle and timed therapeutic intervention for the treatment of cancer. However, there is momentum building in this field, and public funding programs are readily accessible by independent academic groups which would facilitate large clinical trials and uptake into practice if improvement in clinical outcomes by the use of the immune cycle to time therapy is adequately validated.

Nematode Project

Several groups are known to be developing novel anthelmintic compounds for application to commercial ruminants such as sheep. These groups include Novartis, Schering-Plough, Eli Lilly, Bayer, Merck and Pfizer. The status of these development programs is currently unknown to the Company.

Environmental Regulations

The Company s operations are subject to environmental regulations under Australian State legislation. In particular, the Company is subject to the requirements of the Environment Protection Act 1993. A license has been obtained under this Act to produce listed waste.

As of June 30, 2008, the Company held a 14.66% direct equity interest in the North Laverton Joint Venture with Regis Resources Limited (Regis) that had been equity accounted to a nil balance. The Joint Venture had continuing expenditure requirements as prescribed by the Western Australian Mines Department in respect of its prospecting and exploration licenses and mining leases owned by the joint venture. As of June 30, 2008, the Company had recorded a provision for $94,987 in respect of its share of the estimated rehabilitation costs associated with the North Laverton project. The amount of the provision was based on calculations provided to the Company by Regis as project manager.

On August 27, 2008, the Company sold its entire interest in the Joint Venture and, as part of the sale, it was fully indemnified by Regis against any future rehabilitation liabilities which may arise from the exploration activities of the Joint Venture undertaken up until the date of sale. This indemnification subsequently enabled the Company, during the year ended June 30, 2009, to fully reverse the provision of $94,987 in respect of such liabilities which had been recorded in the Company s balance sheet as of June 30, 2008.

Item 4.C Corporate Structure

The diagram below shows the corporate structure of the Genetic Technologies group as of the date of this Annual Report:

Notes: Phenogen Sciences Inc. was incorporated by the Company in the State of Delaware on June 28, 2010.

Genetic Technologies is the holding company of the group and is listed on the Australian Securities Exchange, under the code GTG and, via its ADRs, on the NASDAQ Capital Market, under the ticker symbol GENE.

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Item 4.D Property, Plant and Equipment

As of the date of this Report, the Company has executed four leases in respect of premises occupied by the Group.

Fitzroy, Victoria

Genetic Technologies Limited rents the offices and laboratory premises which are located at 60-66 Hanover Street, Fitzroy, Victoria, Australia (an inner suburb of Melbourne) from Crude Pty. Ltd. The lease is due to expire on September 30, 2013. The current annual rental charge is approximately $286,000. Genetic Technologies Limited does not have an option to purchase the leased premises at the expiry of the lease period.

Charlotte, North Carolina

Phenogen Sciences Inc., a wholly-owned subsidiary of Genetic Technologies Limited, rents office premises which are located at 9115 Harris Corners Parkway, Suite 320, Charlotte, North Carolina, USA from HC 9115 LLC. The lease is due to expire on October 31, 2012. The current annual rental charge is approximately USD 31,740. Phenogen Sciences Inc. does not have an option to purchase the leased premises at the expiry of the lease period.

Beijing, China

Genetic Technologies (Beijing) Limited, another wholly-owned subsidiary, rents office premises which are located in Beijing, China. The lease expires on February 28, 2011. The monthly rental cost is approximately $370. Any extension of the lease at the end of the lease period will require the agreement of both parties. Genetic Technologies (Beijing) Limited does not have an option to purchase the leased premises at the expiry of the lease period.

Devon Meadows, Victoria

Genetic Technologies Limited rents veterinary premises which are located at 2330 South Gippsland Highway, Devon Meadows, Victoria, Australia (a south eastern suburb of Melbourne). The lease, which expires on June 30, 2011, covers premises that are owned by Robert Watts and Ming Chen. The annual rental cost is $29,640. Any extension of the lease at the end of the lease period will require the agreement of both parties. Genetic Technologies Limited does not have an option to purchase the leased premises at the expiry of the lease period.

Item 5. Operating and Financial Review and Prospects

You should read the following discussion and analysis in conjunction with Item 3.A Selected Financial Data and our financial statements, the notes to the financial statements and other financial information appearing elsewhere in this Annual Report. In addition to historical information, the following discussion and other parts of this Annual Report contain forward-looking statements that reflect our plans, estimates, intentions, expectations and beliefs. Our actual results could differ materially from those discussed in the forward-looking statements. See the Risk Factors section of Item 3 and other forward-looking statements in this Annual Report for a discussion of some, but not all, factors that could cause or contribute to such differences.

Item 5.A Operating Results

Overview

Our Formation

GeneType AG was incorporated in Zug, Switzerland on February 13, 1989 to exploit the commercialization of the hypothesis that the non-coding region of the human HLA gene complex of chromosome 6 is a valuable and highly ordered reservoir of useful genetic information, largely overlooked by the rest of the world.

Genetic Technologies Limited was incorporated on January 5, 1987 as Concord Mining NL in Western Australia. On August 13, 1991, we changed our name to Consolidated Victorian Gold Mines NL to better reflect the operations of the Company at the time. On December 2, 1991, we again changed our name to Consolidated Victorian Mines NL. On March 5, 1995, we again changed our name to Duketon Goldfields NL. On October 15, 1995, we changed our status from a No Liability company to a company limited by shares and the name became Duketon Goldfields Limited. On August 29, 2000, we changed our name to Genetic Technologies Limited, which is the current name of the Company.

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On August 29, 2000, Duketon Goldfields Limited received shareholder approval to change its activities from a mining company to a biotechnology and genetics company on the acquisition of all the issued capital of GeneType AG of Switzerland. Following the acquisition of GeneType AG, the new combination has been engaged in the researching, developing and commercialization of genetic concepts primarily related to our intron sequence patents and genomic mapping patents. We are also the largest accredited paternity testing laboratory in Australia which GeneType has been operating since 1990. Over the past seven years, the Company has granted licenses to its patents and expects to derive revenue from further licensing of its patents. Prior to the merger with GeneType AG, the mining exploration activities had ceased and were being progressively disposed of by August 2000. The company was basically an investment shell and following the completion of the merger the old shareholders of GeneType AG were in control of the company which formed the basis for treating the acquisition of GeneType AG as a reverse acquisition.

Development Stage Enterprise

Until 2002, we were a development stage enterprise. We had been developing our technology that resulted in the granting of seven families of patents in the USA which we have now actively started to commercialize and enforce. Since inception up to June 30, 2010, we have incurred $68,374,028 in accumulated operating losses. Our losses have resulted principally from costs incurred in research and development and from general and administrative costs associated with our operations. Refer to the Consolidated Statements of Operations in our attached financial statements.

The research and development costs incurred prior to August 2000 were funded by shareholders of GeneType AG. On completion of the merger of Duketon Goldfields Limited and GeneType AG in August 2000, to form Genetic Technologies Limited, existing funds of approximately $6 million within Genetic Technologies Limited were applied towards research and development and general and administrative expenses associated with our operations. The Company also sold its investment in Cytomation Inc. of Fort Collins, Colorado in November 2001 for approximately $6 million. The funds realized from this sale were applied towards research and development and general and administrative expenses associated with our operations. The Company has completed several placements of shares, including one in August 2003, and there have been other amounts raised from the exercise of unlisted options. We have primarily depended on these sources of funds to meet our financing needs. However, we now license our non-coding technology and provide a series of genetic tests, both of which generate revenue to fund our expenses.

The extent to which we continue to incur losses will, amongst other things, depend on the quantum of license fees received from the licensing of our patents, the amount of annuities and royalties we receive from past licenses, the success we have with respect to the commercialization of our research projects, the rate at which our new tests are taken up by our customers and generally the number of genetic tests we conduct. We may not be able to license our technology successfully or ever achieve or sustain profitability.

Where We Derive our Revenues

Our major source of revenues up to June 30, 2002 were grants received from the Australian Government under the START Program licensing, fees from licensing the non-coding patents, DNA paternity testing services income in Australia and interest income from our cash on deposit and other cash equivalents.

Since commencing our licensing program during the year ended June 30, 2002, the Company has been successful in securing licenses for its technology from a total of 47 commercial licensees and 6 research licensees (see Item 4A for a complete list). We have also received proceeds from the disposal of some of our remaining non-core mining assets which were held for resale in Australia and Canada during the year ended June 30, 2003 and from the sales of various shares in other companies which we formerly held. None of this income is recurring.

Fiscal Year

As an Australian company, our fiscal, or financial, year ends on June 30 each year. We produce audited consolidated accounts at the end of June each year and provide reviewed six-monthly accounts at the end of December each year, both of which are prepared under Australian Accounting Standards as issued by the Australian Accounting Standards Board and International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board.

Recent Accounting Pronouncements

In respect of the year ended June 30, 2010, the Group has assessed all new accounting standards mandatory for adoption during the current year, noting no new standards which would have a material affect on the disclosure in these financial statements. There has been no affect on the profit and loss or the financial position of the Group.

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Certain new accounting standards and interpretations have been published that are not mandatory for June 30, 2010 reporting periods. The Group s and the parent entity s assessment of the impact of these new standards and interpretations is set out below.

- *IFRS 2009-8 Amendments to International Accounting Standards Group Cash-Settled Share-Based Payment Transactions [IFRS 2] (effective for all accounting periods commencing on or after January 1, 2010)*

The amendments made by the IASC to IFRS 2 confirm that an entity receiving goods or services in a group share-based payment arrangement must recognize an expense for those goods or services regardless of which entity in the group settles the transaction or whether the transaction is settled in shares or cash. They also clarify how the group share-based payment arrangement should be measured, that is, whether it is measured as an equity- or a cash-settled transaction. The Group will apply these amendments retrospectively for the financial reporting period commencing on July 1, 2010. There will be no impact on the Group s or the parent entity s financial statements.

- *IFRS 2009-10 Amendments to Australian Accounting Standards Classification of Rights Issues [IAS 32] (effective for all accounting periods commencing on or after February 1, 2010)*

In October 2009, the IASC issued an amendment to IAS 32 Financial Instruments: Presentation which addresses the accounting for rights issues that are denominated in a currency other than the functional currency of the issuer. Provided certain conditions are met, such rights issues are now classified as equity regardless of the currency in which the exercise price is denominated. Previously, these issues had to be accounted for as derivative liabilities. The amendment must be applied retrospectively in accordance with IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors. The Group will apply the amended standard from July 1, 2010. As the Group has not made any such rights issues, the amendment will not have any effect on the Group s or the parent entity s financial statements.

- *IFRS 7 Financial Instruments and IFRS 2009-11 Amendments to Australian Accounting Standards arising from IFRS 7 (effective from January 1, 2013)*

IFRS 7 Financial Instruments addresses the classification and measurement of financial assets and is likely to affect the group s accounting for its financial assets. The standard is not applicable until January 1, 2013 but is available for early adoption. The Group is yet to assess its full impact. However, initial indications are that it may affect the Group s accounting for its available-for-sale financial assets, since IFRS 7 only permits the recognition of fair value gains and losses in other comprehensive income if they relate to equity investments that are not held for trading. Fair value gains and losses on available-for-sale debt investments, for example, will therefore have to be recognized directly in profit or loss. In the current reporting period, the Group recognized no such gains or losses in other comprehensive income (2009: $170,000). The Group has not yet decided when to adopt 1FRS 7.

- *Revised IAS 24 Related Party Disclosures and IFRS 2009-12 Amendments to Australian Accounting Standards (effective from January 1, 2011)*

In December 2009, the IASC issued a revised IAS 24 Related Party Disclosures. It is effective for accounting periods beginning on or after January 1, 2011 and must be applied retrospectively. The amendment removes the requirement for government-related entities to disclose details of all transactions with the government and other government-related entities and clarifies and simplifies the definition of a related party. The group will apply the amended standard from July 1, 2011. When the amendments are applied, the Group and the parent entity will need to disclose any transactions between its subsidiaries and its associates. However, it has yet to put systems into place to capture the necessary information. It is therefore not possible to disclose the financial impact, if any, of the amendment on the related party disclosures.

- *IFRIC Interpretation 19 Extinguishing financial liabilities with equity instruments and IFRS 2009-13 Amendments to Australian Accounting Standards arising from Interpretation 19 (effective from July 1, 2010)*

IFRIC Interpretation 19 clarifies the accounting when an entity renegotiates the terms of its debt with the result that the liability is extinguished by the debtor issuing its own equity instruments to the creditor (debt for equity swap). It requires a gain or loss to be recognized in profit or loss which is measured as the difference between the carrying amount of the financial liability and the fair value of the equity instruments issued. The Group will apply the interpretation from July 1, 2010. It is not expected to have any impact on the Group s or the parent entity s financial statements since it is only retrospectively applied from the beginning of the earliest period presented (July 1, 2009) and the group has not entered into any debt for equity swaps since that date.

These are the only changes which are expected to be of relevance to the Group.

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Critical Accounting Policies

(a) Basis of consolidation

The consolidated financial statements comprise the financial statements of Genetic Technologies Limited and its subsidiaries (collectively the Group). The financial statements of subsidiaries are prepared for the same reporting period as the parent, using consistent accounting policies. Adjustments are made to bring into line any dissimilar accounting policies that may exist. All intercompany balances and transactions, including unrealized profits arising from intra-group transactions, have been eliminated in full. Unrealized losses are eliminated unless costs cannot be recovered.

Subsidiaries are consolidated from the date on which control is transferred to the Group and cease to be consolidated from the date on which control is transferred out of the Group. Where there is loss of control of a subsidiary, the consolidated financial statements include the results for the part of the reporting period during which Genetic Technologies Limited has control. Minority interests represent the interests not held by the Group in Gtech International Resources Limited, ImmunAid Pty. Ltd. and AgGenomics Pty. Ltd.

(b) Foreign currency translation

Both the functional and presentation currency of Genetic Technologies Limited and its Australian subsidiaries is the Australian dollar (AUD). Transactions in foreign currencies are initially recorded in the functional currency at the exchange rates ruling at the date of the transaction. Monetary assets and liabilities which are denominated in foreign currencies are retranslated at the rate of exchange ruling at the balance sheet date. All differences are taken to the statement of comprehensive income.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rate ruling at the date of the initial transaction. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates ruling at the date when the fair value was determined.

The functional currencies of the Company s five overseas subsidiaries are as follows:

Gtech International Resources Limited Canadian dollars (CAD)

Genetic Technologies (Beijing) Limited Chinese yuan (CNY)

GeneType AG Swiss francs (CHF)

GeneType Corporation United States dollars (USD)

Phenogen Sciences Inc. United States dollars (USD)

As at the reporting date, the assets and liabilities of these overseas subsidiaries are translated into the presentation currency of Genetic Technologies Limited at the rate of exchange ruling at the balance sheet date and the statement of comprehensive income are translated at the weighted average exchange rates for the period. The exchange differences arising on the retranslation are taken directly to a separate component of equity. On disposal of a foreign entity, the deferred cumulative amount recognized in equity relating to that particular foreign operation is recognized in the statement of comprehensive income.

(c) Fair value estimation

The fair value of financial instruments that are not traded in an active market (for example, non-listed equity securities classified as available-for-sale investments) is determined using valuation techniques, including the last price at which shares were issued to third parties, where amounts are reliably measured. The Group uses various methods and makes assumptions that are based on market conditions existing at each balance date. Information including quoted market prices and details of recent capital raisings is used to determine fair value for these remaining financial instruments. Available-for-sale investments are measured at approximate market value, in cases where fair value cannot be reliably determined.

The carrying values less impairment provisions of trade receivables are assumed to approximate their fair values due to their short-term nature.

(d) Segment reporting

An *operating segment* is a component of the Group:

- that engages in business activities from which it may earn revenues and incur expenses (including revenues and expenses relating to transactions with other components of the Group);

- whose operating results are regularly reviewed by the Group s chief operating decision maker to make decisions about resources to be allocated to the segment and assess its performance; and

- for which discrete financial information is available.

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The Group has adopted IFRS 8: Operating Segments from July 1, 2008. The new standard requires a management approach under which segment information is presented on the same basis as that used for internal reporting purposes. This did not result in a change in the number of reportable segments presented. In addition, the segments are reported in a manner that is consistent with the internal reporting provided to the chief operating decision maker. There has been no other impact on the measurement of the Company s assets and liabilities.

(e) Earnings per share

Basic EPS is calculated as the net loss attributable to members divided by the weighted average number of ordinary shares.

(f) Parent entity financial information

The financial information for the parent entity, Genetic Technologies Limited, has been prepared on the same basis as the consolidated financial statements, except as set out below:

Investments in, and loans to, subsidiaries

Investments in subsidiaries are accounted for at cost in the financial statements of Genetic Technologies Limited. Loans to subsidiaries are written down to their recoverable value as at balance date.

Financial guarantees

As at balance date, the parent entity had agreed to fund by way of loan all of the operating expenses of ImmunAid Pty. Ltd. (a subsidiary) up to, and including, December 31, 2010 and that it would not seek repayment of the loan during that period.

(g) Revenue recognition

Revenues are recognized to the extent that it is probable that the economic benefits will flow to the entity and the revenues can be reliably measured. Revenues are recognized at the fair value of the consideration received or receivable net of the amounts of Goods and Services Tax (GST). The following specific recognition criteria must also be met before revenue is recognized:

License fees received

License fee income is recorded on the execution of a binding agreement where the Group has no future obligations, income is fixed and determinable, and collection is reasonably assured. Consistent with the various license agreements, the Group does not grant refunds to its customers.

Rendering of services

Revenues from the rendering of services are recognized when the services are provided and the fee for the services provided is recoverable. Service arrangements are of short duration (in most cases less than three months).

Royalties and annuities received

The Company licenses the use of its patented genetic technologies. Royalties and annuities arising from these licenses are recognized when earned in accordance with the substance of the agreement, in cases where no future performance is required by the Company and collection is reasonably assured.

Interest received

Revenue is recognized as the interest accrues using the effective interest method. Interest charged on loans to related parties is charged on commercial and arm s-length terms and conditions.

Research and development grants received

The Company receives non-refundable non-Government grants that assist it to fund specific research and development projects. These grants generally provide for the reimbursement of approved costs incurred as defined in the various agreements.

(h) Share-based payment transactions

The Group provides benefits to Group employees in the form of share-based payment transactions, whereby employees render services and receive rights over shares (equity-settled transactions). There is currently an Employee Option Plan in place to provide these benefits to executives and employees and the cost of these transactions is measured by reference to the fair value at the date they are granted.

The fair value of options granted is determined by Cape Leveque Securities Pty. Ltd., an independent valuer, using a Black-Scholes option pricing model. Cape Leveque Securities Pty. Ltd. has consented to having its name included in this Report.

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In valuing equity-settled transactions, no account is taken of any non-market performance conditions. The cost of equity-settled transactions is recognized, together with a corresponding increase in equity, over the period in which the relevant vesting conditions are fulfilled, ending on the date that the relevant employees become fully entitled to the award (vesting date).

The cumulative expense recognized for equity-settled transactions at each reporting date until vesting date reflects (i) the extent to which the vesting period has expired; and (ii) the number of awards that, in the opinion of the Directors of the Group, will ultimately vest. This opinion is formed based on the best information available at balance date.

No expense is recognized for any awards that do not ultimately vest. Where the terms of an equity-settled award are modified, as a minimum an expense is recognized as if the terms had not been modified. In addition, an expense is recognized for any increase in the value of the transaction as a result of the modification, as measured at the date of modification. Where appropriate, the dilutive effect of outstanding options is reflected as additional share dilution in the computation of diluted earnings per share.

The Company s policy is to treat the share options of terminated employees as forfeitures.

(i) Finance costs

Finance costs are recognized as an expense when incurred.

(j) Income tax

The income tax expense or revenue for the period is the tax payable on the current period s taxable income based on the national income tax rate for each jurisdiction adjusted by changes in deferred tax assets and liabilities attributable to temporary differences and unused tax losses.

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, the deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that, at the time of the transaction, affects neither accounting nor taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the balance sheet date and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled. Deferred tax assets are recognised for deductible temporary differences and unused tax losses only if it is probable that future taxable amounts will be available to utilize those temporary differences and losses.

Deferred tax liabilities and assets are not recognised for temporary differences between the carrying amount and tax bases of investments in controlled entities where the parent entity is able to control the timing of the reversal of the temporary differences and it is probable that the

differences will not reverse in the foreseeable future. Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same taxation authority. Current tax assets and tax liabilities are offset where the entity has a legally enforceable right to offset and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously. Current and deferred tax balances attributable to amounts recognised directly in equity are also recognised directly in equity.

Current and deferred tax is recognized in profit or loss, except to the extent that it relates to items recognized in other comprehensive income or directly in equity. In this case, the tax is also recognized in other comprehensive income or directly in equity, respectively.

Tax consolidation legislation

Genetic Technologies Limited and its wholly-owned Australian-resident subsidiaries have implemented the tax consolidation legislation. The head entity, Genetic Technologies Limited, and the subsidiaries in the tax consolidated group account for their own current and deferred tax amounts. These tax amounts are measured as if each entity in the tax consolidated group continues to be a stand alone taxpayer in its own right.

In addition to its own current and deferred tax amounts, Genetic Technologies Limited also recognises the current tax liabilities (or assets) and the deferred tax assets arising from unused tax losses and unused tax credits assumed from subsidiaries in the tax consolidated group.

Assets or liabilities arising under tax funding agreements with the tax consolidated entities are recognised as amounts receivable from or payable to other entities in the Group. Details about the tax funding agreement are disclosed in Note 7 of the Financial Statements. Any difference between the amounts assumed and amounts receivable or payable under the tax funding agreements are recognised as a contribution to (or distribution from) wholly-owned tax subsidiaries.

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(k) Withholding tax

The Group generates revenues from the granting of licenses to parties resident in overseas countries. Such revenues may be subject to the deduction of local withholding tax. In certain cases, these revenues are paid to the Group without appropriate withholding tax having been deducted. Accordingly, the Group recognizes a provision in respect of the Directors best estimate of the amounts which may be payable.

(l) Other taxes

Revenues, expenses and assets are recognized net of the amount of Goods and Services Tax (GST) except where the GST incurred on a purchase of goods and services is not recoverable from the taxation authority, in which case the GST is recognized as part of the cost of acquisition of the asset or as part of the expense item as applicable; and receivables and payables are stated with the amount of GST included. The net amount of GST recoverable from, or payable to, the taxation authority is included as part of receivables or payables in the balance sheet.

Cash flows are included in the cash flow statement on a gross basis and the GST component of cash flows arising from investing and financing activities, which is recoverable from, or payable to, the taxation authority are classified as operating cash flows.

(m) Cash and cash equivalents

Cash and short-term deposits in the balance sheet comprise cash at bank and in hand and short-term deposits with an original maturity of three months or less. For the purposes of the cash flow statement, cash and cash equivalents consist of cash and cash equivalents as defined above. Cash at bank earns interest at floating rates based on daily bank deposit rates. Short-term deposits are made for varying periods of between one day and three months, depending on the immediate cash requirements of the Group, and earn interest at the respective short-term deposit rates.

(n) Trade and other receivables

Trade receivables, which are non-interest bearing and generally have terms of between 30 to 90 days, are recognized and carried at original invoice amount less an allowance for any uncollectible amounts. An allowance for doubtful debts is made when there is objective evidence that a receivable is impaired. Such evidence includes an assessment of the debtor s ability and willingness to pay the amount due. The amount of the allowance/impairment loss is measured as the difference between the carrying amount of the trade receivables and the estimated future cash flows expected to be received from the relevant debtors. Details regarding interest rate and credit risk of current receivables are disclosed in Note 35 of the Financial Statements.

(o) Inventories

Inventories principally comprise laboratory and other supplies and are valued at the lower of cost and net realizable value. Inventory costs are recognized as the purchase price of items from suppliers plus freight inwards and any applicable landing charges. Costs are assigned on the basis of weighted average costs.

(p) Restricted security deposits

Restricted security deposits include cash deposits held as security for the performance of certain contractual obligations.

(q) Investments and other financial assets

All investments are initially recognized at cost, being the fair value of the consideration given plus directly attributable transaction costs. After initial recognition, investments in subsidiaries are carried at cost, less any impairment disclosed in the separate financial statements of Genetic Technologies Limited. Other investments, which are classified as available-for-sale, are measured at fair value if this can reliably be determined or at cost where fair value cannot be reliably determined. Gains or losses on available-for-sale investments are recognized as a separate component of equity until the investment is sold, or otherwise disposed of, or until the investment is determined to be impaired, at which time the cumulative gain or loss previously reported in equity is included in the statement of comprehensive income.

Available-for-sale investments

Available-for-sale investments consist of investments in ordinary shares which have no fixed maturity date or coupon rate. After initial recognition, available-for-sale securities are measured at fair value with gains or losses being recognized as a separate component of equity until such time as the investment is either derecognized or is determined to be impaired, at which time the cumulative gain or loss previously recognized in equity is recognized in profit or loss. The fair values of investments that are actively traded in organized financial markets are determined by reference to the quoted market bid prices applicable as at the close of business on the balance sheet date.

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The fair value of unlisted available-for-sale investments has been estimated using valuation techniques based on assumptions that are not supported by observable market prices or rates. Management believes the estimated fair values (where reliably measured) resulting from the valuation techniques and recorded in the balance sheet are reasonable and the most appropriate at the balance sheet date. Any related changes in fair values are directly recorded in equity. Available-for-sale investments are measured at cost, where fair value cannot be reliably determined.

(r) Property, plant and equipment

Plant and equipment is stated at cost less accumulated depreciation and any impairment in value. Depreciation is calculated on either a straight-line or diminishing value basis over the estimated useful life of the respective asset as follows:

Laboratory / veterinary equipment 3 to 5 years

Computer equipment 2 to 5 years

Office equipment 2 to 5 years

Equipment under hire purchase 3 years

Leasehold improvements lease term, being between 4 and 10 years

Costs relating to day-to-day servicing of any item of property, plant and equipment, which may include the cost of small parts, are recognized in profit or loss as incurred. The cost of replacing larger parts of some items of property, plant and equipment are capitalized when incurred and depreciated over the period until their next scheduled replacement.

(s) Intangible assets

Patents

Patents held by the Group are used in the licensing, testing and research areas and are carried at cost and amortized on a straight-line basis over their useful lives, being from 5 to 10 years. External costs incurred in filing and protecting patent applications, for which no future benefit is reasonably assured, are expensed as incurred.

Research and development costs

Costs relating to research and development activities are expensed as incurred. An intangible asset arising from development expenditure on an internal project is recognized only when the Group can demonstrate the technical feasibility of completing the intangible asset so that it will be available for use or sale, its intention to complete and its ability to use or sell the asset, how the asset will generate future economic benefits, the availability of resources to complete the development and the ability to measure reliably the expenditure attributable to the intangible asset during its development. To date, all development costs have been expensed as incurred as their recoverability cannot be regarded as assured.

(t) Goodwill

Goodwill on acquisition is initially measured at cost, being the excess of the cost of the business combination over the acquirer s interest in the net fair value of the identifiable assets, liabilities and contingent liabilities. Following its initial recognition, goodwill is measured at cost less any accumulated impairment losses. Goodwill is not amortized.

Goodwill is reviewed for impairment at each reporting date, or more frequently if events or changes in circumstances indicate that the carrying value may be impaired. Impairment is determined by assessing the recoverable amount of the cash-generating unit to which the goodwill relates. Where the recoverable amount of the cash-generating unit is less than the carrying amount, an impairment loss is recognized.

Where goodwill forms part of a cash-generating unit and part of the operation within that unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal of the operation. Goodwill disposed of in this circumstance is measured on the basis of the relative values of the operation disposed of and the portion of the cash-generating unit retained.

For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group s cash-generating units, or groups of cash-generating units, that are expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities of the Group are assigned to those units or groups of units. Each unit or group of units to which the goodwill is so allocated represents the lowest level within the Group at which the goodwill is monitored for internal management purposes and is not larger than an operating segment in accordance with *IFRS 8 (AASB 8) Operating Segments*.

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(u) Impairment of assets (other than goodwill)

The Group assesses at each reporting date whether there is an indication that an asset may be impaired. If any such indication exists, the Group makes an estimate of the asset s recoverable amount. An asset s recoverable amount is the higher of its fair value less costs to sell and its value in use and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. In such cases, the asset is tested for impairment as part of the cash-generating unit to which it belongs. When the carrying amount of an asset or cash-generating unit exceeds its recoverable amount, the asset or cash-generating unit is considered impaired and is written down to its recoverable amount.

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Impairment losses relating to operations are recognized in those expense categories consistent with the function of the impaired asset unless the asset is carried at its revalued amount (in which case the impairment loss is treated as a revaluation decrease in the same manner as the associated impairment expense).

An assessment is made at each reporting date as to whether there is any indication that previously recognized impairment losses may no longer exist or may have decreased. If such indication exists, the recoverable amount is estimated. A previously recognized impairment loss is reversed only if there has been a change in the estimates used to determine the asset s recoverable amount since the last impairment loss was recognized. If so, the carrying amount of the asset is increased to its recoverable amount. The increased amount cannot exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognized for the asset in prior years. Such reversal is recognized in profit or loss unless it reverses a decrement previously charged to equity, in which case the reversal is treated as a revaluation increase. After such a reversal, the depreciation charge is adjusted in future periods to allocate the asset s revised carrying amount, less any residual value, on a systematic basis over its remaining useful life.

(v) Trade and other payables

Trade payables and other payables are carried at amortized cost and represent future liabilities for goods and services provided to the Group prior to the end of the financial year that are unpaid and arise when the Group becomes obliged to make future payments in respect of the purchase of these goods and services. Trade payables and other payables generally have terms of between 30 and 60 days.

(w) Leases and hire purchase agreements

Finance leases and hire purchase agreements, which transfer to the Group substantially all the risks and benefits incidental to ownership of the financed item, are capitalized at the inception of the lease at the fair value of the leased property or, if lower, at the present value of the minimum lease payments.

Lease and hire purchase payments are apportioned between finance charges and a reduction of the associated liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are recognized as an expense in profit or loss. Capitalized leased assets and assets under hire purchase are depreciated over the shorter of the estimated useful life of the asset or the term of the agreement. Leases where the lessor retains substantially all the risks and benefits of ownership of the asset are classified as operating leases. Operating lease payments are recognized as an expense in the statement of comprehensive income on a straight-line basis over the lease term.

(x) Deferred revenue

License revenues and annuities

License revenues received in respect of future accounting periods are deferred until the Company has fulfilled its obligations under the terms of the agreement. Annuity payments due under the respective license agreemenmts are recognized upon receipt. In cases where revenue has been deferred because the Company has future performance obligations, revenue is recognised as the Company s performance obligations are satisfied.

Where a licence agreement provides for the payment of regular annuities to the Company and the licensee has the right to terminate the agreement prior to the payment of those annuities with no penalty, the Company does not recognise revenue until such time as the associated cash payments are received, as it is not considered probable that the benefits of the transaction will flow to the Company until cash collection is made. Where such annuities are paid in advance, the revenue is allocated on a pro-rata basis with the balance being reflected in the balance sheet as a deferred revenue liability.

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Genetic testing and reproductive services revenues

The Company operates facilities which provide genetic testing and reproductive services. The Company recognises revenue from the provision of these services when the services have been completed. Fees received in advance of the testing process or reproductive service are deferred until such time as the Company completes its performance obligations.

Grant revenues

Grants are recognized when there is reasonable assurance that the grant will be received and all attaching conditions will be complied with. When the grant relates to an expense item, it is recognized as income over the periods necessary to match the grant on a systematic basis to the costs that it is intended to compensate. When the grant relates to an asset, the fair value is credited to a deferred income account and is released to the statement of comprehensive income over the expected useful life of the relevant asset by equal annual instalments.

(y) Provisions

Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. Where the Group expects some or all of a provision to be reimbursed, the reimbursement is recognized as a separate asset but only when the reimbursement is virtually certain. The expense relating to any provision is presented in the statement of comprehensive income net of any reimbursement.

If the effect of the time value of money is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability. Where discounting is used, the increase in the provision due to the passage of time is recognized as a finance cost.

(z) Employee benefits

Provision is made for employee benefits accumulated as a result of employees rendering services up to the reporting date. These benefits include wages and salaries, annual leave and long service leave. Liabilities arising in respect of wages and salaries, annual leave and any other employee benefits expected to be settled within twelve months of the reporting date are measured at their nominal amounts based on remuneration rates which are expected to be paid when the liability is settled. All other employee benefit liabilities are measured at the present value of the estimated future cash outflow to be made in respect of services provided by employees up to the reporting date using the projected unit credit method. Any unused sick leave is forfeited and not accumulated at year end. Expenses for non-accumulating sick leave are recognized when the leave is taken during the year and are measured at rates paid or payable.

In determining the present value of future cash outflows, the market yield as at the reporting date on national government bonds, which have terms to maturity approximating the terms of the related liability, are used. Employee benefits expenses and revenues arising in respect of wages and salaries, non-monetary benefits, annual leave, long service leave and other leave benefits and other types of employee benefits are recognized against profits on a net basis in their respective categories.

(aa) Contributed equity

Issued and paid up capital is recognized at the fair value of the consideration received by the Company. Any transaction costs arising on the issue of ordinary shares are recognized directly in equity as a deduction, net of tax, of the share proceeds received. The Company has a share-based payment option plan under which options to subscribe for the Company s shares have been granted to certain executives and other employees (refer Note 28 of the Financial Statements).

(ab) Reclassifications

Certain reclassifications have been made in the financial statements to ensure that prior year comparatives conform to current year presentations.

(ac) Business combinations

The acquisition method of accounting is used to account for all business combinations, including business combinations involving entities or businesses under common control, regardless of whether equity instruments or other assets are acquired. The consideration transferred for the acquisition of a subsidiary comprises the fair values of the assets transferred, the liabilities incurred and the equity interests issued by the Group. The consideration transferred also includes the fair value of any contingent consideration arrangement and the fair value of any pre-existing equity interest in the subsidiary. Acquisition-related costs are expensed as incurred. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are, with limited exceptions, measured initially at their fair values at the acquisition date. On an acquisition-by-acquisition basis, the Group recognizes any non-controlling interest in the acquiree either at fair value or at the non-controlling interest s proportionate share of the acquiree s net identifiable assets.

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The excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the Group s share of the net identifiable assets acquired is recorded as goodwill. If those amounts are less than the fair value of the net identifiable assets of the subsidiary acquired and the measurement of all amounts has been reviewed, the difference is recognized directly in profit or loss as a bargain purchase. Where settlement of any part of cash consideration is deferred, the amounts payable in the future are discounted to their present value as at the date of exchange. The discount rate used is the entity s incremental borrowing rate, being the rate at which a similar borrowing could be obtained from an independent financier under comparable terms and conditions.

Change in accounting policy

A revised AASB 3: Business Combinations became operative on July 1, 2009. While the revised standard continues to apply the acquisition method to business combinations, there have been some significant changes.

All purchase consideration is now recorded at fair value at the acquisition date. Contingent payments classified as debt are subsequently remeasured through profit or loss. Under the Group s previous policy, contingent payments were only recognized when the payments were probable and could be measured reliably and were accounted for as an adjustment to the cost of acquisition.

Acquisition-related costs are expensed as incurred. Previously, they were recognized as part of the cost of acquisition and therefore included in goodwill.

Comparison of the year ended June 30, 2010 to the year ended June 30, 2009

Revenues from operations

Our revenues from operations (which include fees from the sale of genetic testing and reproductive services) increased by 8%, or $423,469, on the 2009 financial year. The business of reproductive services, which forms the basis of the business owned by Frozen Puppies Dot Com Pty. Ltd., contributed $107,227 to this increase. Breast cancer testing (up $355,343), canine disease testing (up $55,346) and forensic testing (up $90,899) also contributed significantly to the increase. Our recently-introduced Ancestry test contributed $34,435 to revenue growth. Looking forward, we envisage encouraging growth in the volume of tests conducted in future following the scheduled launch of the Company s new BREVAGen breast cancer test in the U.S. market early in the 2011 calendar year. The income we earned from paternity testing fell by $76,564 from the 2009 financial year. Revenues from operations principally form part of the Australian geographic segment.

Licensing revenues

The total revenues generated from our licensing activities for the 2010 financial year were $3,739,747 which represented a decrease of 31% on the result from the previous year of $5,391,714. However, following the filing by the Company of a patent infringement suit in the U.S. against nine separate parties in February 2010, the number of new licenses granted has increased significantly. Since that date, new licenses were granted to EraGen Biosciences Inc., Gen-Probe Inc., Laboratories Réunis, Molecular Pathology Laboratory Network Inc. and Quest Diagnostics Inc. prior to the end of the 2010 financial year. Subsequent to year end, further licenses have been granted by the Company as part of settlements reached with several parties named in the infringement suit which have generated total gross fees for the Company of approximately $5.7 million.

As with the 2009 financial year, we continued to receive income from the Applera settlement totaling $611,421, in the form of equipment and reagent credits, representing a decrease of $1,435,786 on the previous year. This reduction is due to the fact that the balance of the equipment credits due under the agreement were drawn down in full during the 2009 financial year. Included in the total licensing revenues is royalty and annuity income of $1,681,444, which has remained stable during the 2010 year. Licensing revenues form part of the Australian geographic segment.

Grant income

Grant income decreased by $338,724 to Nil in the financial year. The previous year included an additional milestone payment from Horticulture Australia Ltd. that became payable on the successful conclusion of the research and development project which the grant income was being used to fund. Grant income forms part of the Australian geographic segment.

Interest income

Interest income decreased by $378,163, or 64%, over the 2009 financial year. This is mainly due to the decrease in cash and cash equivalent balances which fell by 58% over the same period. The prime interest rate, as set by the Reserve Bank of Australia (Australia s Central Bank), rose from 3.00% per annum to 4.50% per annum during this period.

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Employee benefits expenses

Pleasingly, the total employee benefits expenses for 2010 financial year decreased by $493,944 or 8%. Apart from increases due to general inflation, this decrease was attributable to a reduction (66%) in the amount of termination benefits paid out in 2009 ($345,000) as compared with $118,529 in the 2010 financial year and to a significant fall in the Group s consultancy fees which decreased by $109,864 (14%).

Impairment losses and other write-downs

Overall, impairment losses increased by $1,468,508, or 462%, from the preceding 2009 financial year. During the 2010 financial year, the Company recognized an impairment loss on goodwill of $1,264,603. The impairment charge, which related to the Company s reproductive services business, arose following a decision by the Company to strategically realign the business and to focus on the provision of animal genetic tests, rather than the services that were acquired as part of the acquisition of the Frozen Puppies Dot Com business during the 2009 financial year. Plant and equipment ($115,413) and inventories ($6,232) were also impaired due to the decision to exit this business. In addition, $377,648 worth of plant and equipment which was acquired from Applera was impaired due to a decision to exchange surplus laboratory equipment with an Australian-based subsidiary of Applera.

Genetic testing expenses

Genetic testing expenses decreased by $390,790, or 52%, during the 2010 financial year. In the prior year, the Group paid the final net installment of $149,458 under the HAL project. The balance of the decrease was due to a change in accounting policy in regard to the disclosure of cost of sales for the reproductive services area of the business.

Contract research and trial expenses

During the 2009 financial year, the final payment was made to the C.Y. O Connor ERADE Village Foundation following the termination of the agreements on June 15, 2009. The expenditure was therefore significantly reduced in the 2010 financial year from $1,209,260 to only $90,000. The $90,000 relates to the agreement with the University of Newcastle which is scheduled to terminate on December 31, 2010.

Royalties, license fees and commissions paid

Royalties, license fees and commissions paid increased by $44,634, or 13%, during the 2010 financial year. The expense primarily relates to the payment of commissions to licensing contractors in respect of new licenses granted by the Company during the year. The amount of revenue generated from the granting of new licenses decreased over the year, but the commissions increased due to the inclusion of amounts now payable to Sheridan Ross PC, the Denver-based law firm that is managing the Company s assertion program and its U.S. patent infringement suit,

as mentioned above.

Legal and patent fees

Legal and patent fees decreased by $129,148, or 9%, during the 2010 financial year. This decrease was due to non-recurring legal fees associated with the acquisition of Frozen Puppies Dot Com Pty. Ltd. and the enforcement of the Company s rights to conduct testing of the BRCA1 and BRCA2 genes which were incurred during the prior year.

Administration expenses

Administration expenses decreased by $325,676 or 25%, during the 2010 financial year due principally to lower audit and accounting fees and the fact that two years worth of audit fees in respect of the Company s U.S. reporting obligations fell into the 2009 financial year.

Marketing and promotion expenses

Marketing and promotion expenses increased by $67,904, or 25%, during the 2010 financial year. This increase was due to the advertising incurred by the Medical area of the business and the launch of the Ancestry tests.

Comparison of the year ended June 30, 2009 to the year ended June 30, 2008

Revenues from operations

Our revenues from operations (which includes fees from the sale of genetic testing and reproductive services) increased by 37%, or $1,463,397, on the 2008 financial year. The new business of reproductive services, which forms the basis of the business owned by Frozen Puppies Dot Com Pty. Ltd., contributed $782,803 to this increase. Breast cancer testing (up $265,670), and canine disease testing and profiling (up $104,672) also contributed significantly to the increase. However, we see promising increases in the volume of tests conducted in future periods as the number of facilities from which the Company will sell its tests grows in the 2010 financial year from two to six. We expect this progress to continue as additional marketing initiatives continue to be introduced. The income we earned from paternity and forensic testing remained stable during the 2009 financial year. Revenues from operations principally form part of the Australian geographic segment.

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Licensing revenues

Our total licensing revenue generated for the 2009 financial year was $5,391,714, a decrease of 50% on the result from the previous year of $10,730,743. The three new licenses granted were to GeneDX (Bio Reference Laboratories Inc.), Millennium Pharmaceuticals Inc., and TIB MOLBIOL Syntheselabor GmbH. As with the 2008 financial year, we continued to receive income from the Applera settlement totaling $2,047,207, in the form of equipment and reagent credits, representing an increase of $990,072 on the previous year. Included in the total license revenues is royalty and annuity income of $1,697,848, which increased by $784,815, or 86%, during 2009 as we did not receive a major payment during the previous year. Licensing revenues form part of the Australian geographic segment.

Grant income

Grant income increased by $159,726, or 89% in the financial year. It included an additional milestone payment from Horticulture Australia Ltd. that became payable on the successful conclusion of the research and development project which the grant income was being used to fund. Grant income forms part of the Australian geographic segment.

Interest income

Interest income decreased by $330,705, or 36%, over the 2008 financial year. This is mainly due to the decrease in cash and cash equivalent balances by 39% over the same period and a significant fall in deposit interest rates as a result of the Global Financial Crisis. As an example, the prime interest rate, as set by the Reserve Bank of Australia (Australia s Central Bank) fell from 7.25% to 3.00% during this period.

Employee benefits expenses

Total employee benefits expenses for 2009 financial year decreased by $129,417 or 2%. Apart from increases due to general inflation, this decrease was attributable to a change in accounting policy whereby $1,042,397 of employee-related expenses attributable to the testing department were transferred, for the first time, into the labor component of cost of sales. This decrease was partially offset by increases in salaries and wages amounting to $446,038 as a result of additional staff being employed to operate the new veterinary facilities acquired as part of the integration of Frozen Puppies Dot Com Pty. Ltd. The decrease was also partly attributable to a significant fall in the Group s share based payments expense which resulted from the forfeiture of a large number of options following the departure of several senior Management personnel during the 2009 financial year.

Impairment losses and other write-downs

Overall, impairment losses decreased by $2,059,975, or 87%, from the preceding 2008 financial year. During the 2009 financial year, the Company recognized an impairment loss of $245,959 in respect of the carrying value of the Company s investment in certain unlisted shares. The balance of the reduction related to bad debts either written off or provided for. Importantly, unlike during the two preceding financial years, there were no impairment charges raised in respect of the Group s extensive patent portfolio.

Genetic testing expenses

Genetic testing expenses decreased by $851,390, or 53%, during the 2009 financial year. This fall was due mostly to the change in accounting policy in relation to the disclosure of cost of sales, as described above. Reagents previously expensed directly at the time of purchase are now capitalized and then expensed as part of cost of sales after the test has been completed.

Contract research and trial expenses

Contract research and trial expenses incurred during the 2009 financial year of $1,209,260 remained in line with the previous year ($1,267,748) as the Company s various research and development projects continued. During the 2009 financial year, the final payment was made to the C.Y. O Connor ERADE Village Foundation following the termination of the agreements on June 15, 2009.

Royalties, license fees and commissions paid

Royalties, license fees and commissions paid decreased by $534,836, or 60%, during the 2009 financial year. The expense primarily relates to the payment of commissions to licensing contractors in respect of new licenses granted by the Company during the year. As the amount of revenue generated from the granting of new licenses decreased over the year, so too, has the related expense.

Legal and patent fees

Legal and patent fees increased by $512,539, or 59%, during the 2009 financial year. This increase was due to fees associated with the acquisition of Frozen Puppies Dot Com Pty. Ltd., the enforcement of the Company s rights to conduct testing of the BRCA1 and BRCA2 genes, the lodging of new patent applications around the world and a general expansion of the Company s businesses.

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Administration expenses

Administration expenses increased by $465,456 or 55%, during the 2009 financial year due principally to higher audit and accounting fees. This increase was, in turn, due to the fact that two year s worth of audit fees in respect of the Company s US reporting obligations fell into the 2009 financial year.

Marketing and promotion expenses

Marketing and promotion expenses increased by $51,082, or 23%, during the 2009 financial year. This increase was due to the advertising incurred by the new reproductive services area of the business and the launch of a new range of DNA tests under the BITSA brand.

Item 5.B Liquidity and Capital Resources

Summary

Our overall cash position depends on numerous factors, including the success of licensing our non-coding patents, the numbers of genetic tests processed by our laboratory, completion of our product research and development activities, ability to commercialize our products, market acceptance of our products and services and how we choose to commercially exploit our technology. We expect to devote additional capital resources to the expansion of our licensing program on a worldwide basis, continue our research and development programs with a view to commercializing our technology in our target markets, hire and train additional staff, and acquire or make investments in businesses that are complementary to our existing business. Each of these activities will inevitably involve the outflow of cash reserves.

During the years ended June 30, 2010, 2009 and 2008, we have incurred comprehensive losses of $9,530,428, $7,695,596 and $5,493,423, respectively. We anticipate incurring additional one-off establishment costs during the next twelve months as we launch the Company s BREVAGen breast cancer test in the U.S. market and elsewhere and broaden the range of products we offer and increase the number of the markets in which they are sold and commercialize our three principle research and development projects. The extent to which we will incur losses in future years depends largely on the success of the licensing of our non-coding technologies and the expansion of our genetic testing business.

Since inception, our operations have been financed primarily from capital contributions by our stockholders, proceeds from our licensing activities and revenues from operations, grants, and interest earned on the Company s cash and cash equivalents.

During the year ended June 30, 2010, the Company incurred net cash out flows from operations of $4,302,880, $4,923,491 whilst during the year ended June 30, 2008, the Company generated positive cash flows from operations of $422,770. We believe that our cash and cash

equivalents of approximately $3.3 million as of June 30, 2010 will, together with revenues generated from the granting of new licenses to the Company s non-coding technology, provide us with sufficient capital to fund a base level of operations for the next eighteen months as from that date. During this period, we expect to be able to continue to adequately fund our research and development activities, licensing program, product development and commercialization efforts and other operations. Further, as the Company s operations continue to expand, we anticipate that the revenues generated should assist the Company to once again achieve a cash positive result from operations.

Our net cash provided by / (used in) operating activities was $(4,302,880), $(4,923,491) and $422,770 for the years ended June 30, 2010, 2009 and 2008, respectively. Importantly, the Company generated positive net cash flows from operations for the first time in 2007 and again in 2008. Cash used in operating activities for each period consisted primarily of losses incurred in operations reduced by depreciation and amortization expenses, exchange movements and unrealized profits and losses relating to investments. In approximate order of magnitude, cash outflows typically consist of staff-related costs, service testing expenses, general and administrative expenses, research and development costs and legal/patent fees.

Our net cash (used in) investing activities was $(1,039,483), $(353,191) and $(47,399) for the years ended June 30, 2010, 2009 and 2008, respectively. Typically, cash used in investing activities related to the acquisition of laboratory equipment and, during the 2009 financial year, costs associated with the acquisition of Frozen Puppies Dot Com Pty. Ltd. in July 2008. During the 2005 financial year, the establishment of the equipment finance facility described below reduced cash outflows for that year. In addition, the agreement reached with Applera Corporation in December 2005 has provided us with significant credits for laboratory equipment and reagents produced by that company. As of June 30, 2010, the balance of credits due under the various agreements with Applera Corporation was $2,177,362.

Our net cash provided by / (used in) financing activities was $786,243, $(192,591) and $(528,899) for the years ended June 30, 2010, 2009 and 2008, respectively. In respect of the year ended June 30, 2010, the Company generated net cash flows of $1,011,650 from the issue of 27,940,530 ordinary shares. In all three years, outflows from financing activities included the repayment of hire purchase principal in respect of various items of laboratory equipment.

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Apart from the purchase of laboratory equipment of $144,796 in 2010, $213,300 in 2009 and $118,010 in 2008 and the costs associated with the acquisition of Frozen Puppies Dot Com Pty. Ltd. In 2008, we had no material capital expenditures for the years ended June 30, 2010, 2009 and 2008, other than the costs associated with the purchase of assets from Perlegen Sciences, Inc. in 2010.

On January 14, 2005, the Company executed a Master Asset Finance Agreement with National Australia Bank Limited in respect of a $2.5 million asset hire purchase facility (the Facility). As of June 30, 2010, the Company had an outstanding liability in respect of the acquisition of laboratory equipment and associated maintenance contracts under the Facility amounting to $382,640. The use of this Facility enables the Company to better match the cost of the equipment with the future revenues to be generated from it in a cost-effective manner and minimizes the outflow of valuable cash. Also, as of June 30, 2010, the Group had breached one of the covenants of the Facility which governs the hire purchase agreements. Subsequent to balance date, National Australia Bank Limited provided the Group with a letter waiving its right to take any further action in respect of the breach. As a result of the breach, however, all liabilities in respect of the hire purchase agreements as of June 30, 2010 have been classified as current liabilities in the balance sheet.

Future Cash Needs

We expect that operating expenses and, to a lesser extent, capital expenditures will be a material use of our cash resources in future. As of June 30, 2010, we had cash and cash equivalents totaling approximately $3.3 million. We believe that this amount, together with revenues generated from the granting of new licenses to the Company s non-coding technology, will provide us with working capital that is sufficient for our anticipated needs for the next eighteen months as from that date. We do not have any lines of credit apart from the equipment finance facility with National Australia Bank Limited and a nominal credit card facility with Westpac Banking Corporation (via its St. George Bank division) which, as of June 30, 2010, had available credit of $147,000. We anticipate generating additional cash in future years from our licensing activities and the continued expansion of our operational businesses.

Operating Leases

We are obligated under various operating leases for periods expiring through 2014. Payments under non-cancelable operating lease arrangements for office premises, laboratory and veterinary facilities expire on various dates through to September 30, 2013, resulting in the lease commitments over that period which are stated in the table below.

The following is a schedule of future minimum lease payments for operating leases that had initial or remaining non-cancellable lease terms in excess of one year as of June 30, 2010:

Year ending June 30,		
2011	$	459,193
2012		325,723
2013		335,820
2014		61,560
Total minimum lease payments	$	1,182,296

Rent expense and associated body corporate expenses totaling $579,806, $529,234 and $501,239 for the years ended June 30, 2010, 2009 and 2008, respectively, were paid to Bankberg Pty. Ltd., a company associated with former Director, Dr. Mervyn Jacobson, in respect of the Company s office and laboratory expenses in Fitzroy, Victoria, Australia.

The following is a schedule of future minimum hire purchase payments for equipment finance that had initial or remaining non-cancelable lease terms in excess of one year as of June 30, 2010:

Minimum hire purchase payments		
Year ending 2011	$	259,597
Year ending 2012		113,968
Year ending 2013		38,986
Total minimum hire purchase payments	$	412,551
Less: future finance charges		(29,911)
Aggregate hire purchase expenditure contracted for as at reporting date	$	382,640
Aggregate expenditure commitments comprise:		
Current liability	$	382,640
Non-current liability		
Total expenditure commitments	$	382,640

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Item 5.C Research and Development, Patents and Licenses, etc.

Our principal business is biotechnology, with the emphasis on genomics and genetics, the licensing of the non-coding patents, reduction to practice of our fetal cell patents and expansion of the related service testing business.

The following table details historic R&D expenditure by project. All projects are described at Item 4.B above.

	2010 $	2009 $	2008 $
RareCellect	$ 553,768	$ 709,725	$ 775,662
ImmunAid	287,470	331,155	278,175
Nematode project	126,664	365,705	359,184
Research at C.Y. O Connor (notes 1 and 2)	72,148	933,641	4,038,061
Other general R&D	536,453	674,549	218,007
Total R&D expense	$ 1,576,503	$ 3,014,775	$ 5,669,089
Other expenditure	17,749,250	17,025,178	15,666,967
Total expenditure	$ 19,325,753	$ 20,039,953	$ 21,336,056
R&D as a % of total expenditure	8%	15%	27%

Notes: 1. The figure for 2008 of $4,038,061 includes an impairment loss of $2,378,000.

2. Research by the C.Y. O Connor ERADE Village Foundation was terminated during the 2009 financial year.

Due to the nature of the Company s business, it is important that any intellectual property in the form of new discoveries be protected. The table described in Item 4.B hereinabove provides the status of all patent applications the Company has filed.

Item 5.D Trend Information

The Direction of Genetic Research

Following upon the original non-coding inventions made by GeneType AG and the publication and dissemination of this work in the early 1990 s, research groups world-wide increasingly have sought to investigate and, if possible, establish non-coding associations in a great number of diseases which were hitherto unexplained.

In 2002, Nature Publishing Group produced a summary of some 284 separate research projects which sought to establish non-coding associations in relation to either the cause or the outcome of many human diseases. Within that group, more than 100 human conditions have since been shown to be linked to non-coding genetic variations. In 1999, an international collaboration, known as the SNP Consortium was established to identify all single nucleotide polymorphisms (SNPs) of relevance to a complete understanding of human genetics. More recently, the international HapMap project was launched to identify relevant human haplotypes.

All of these projects depend significantly on the basic inventions owned by our Company. It remains our corporate objective to encourage all such research which we expect will, in time, lead to a great number of new commercial licensing opportunities for Genetic Technologies. Such opportunities are also not limited to human applications, given the recent expansion of interest in the genetics of animals, plants and lower forms of life, including parasites and many organisms that contribute to either disease or to recuperative environmental systems of our planet. Such research is likely to expand significantly in the coming years. Our ability to secure licensing agreements from these areas of research as they develop into commercial operations will determine the level of revenue in the future.

The Direction of Genetic Testing

Further to the completed first phase of the Human Genome Project in mid-2001, and then the Mouse Genome Project in December 2002, there is now a greatly improved general understanding of gene structure, gene function and gene expression. This is likely to lead to new genetic tests and new genetic treatments - perhaps even tailored to an individual s unique genetic code. DNA testing for forensic purposes has already been shown to be extremely reliable in matters of criminal justice, disputed paternity and family relationships. Genetic testing will also be increasingly relied upon to assist with disease diagnosis, and also in the improved assessment disease risk factors. In addition, genetic testing will be applied more and more to help identify specific animal and plant traits that are either desirable or undesirable, in order to help breeders better select their future seed stock. We believe the demand for an expansion of genetic testing will continue to grow in the coming years.

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Item 5E. Off-balance sheet arrangements

Apart from our settlement arrangements with Applera Corporation, pursuant to which we are entitled to draw down certain items of equipment and reagents, we have no off-balance sheet arrangements that have or are reasonably likely to have current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that are material to investors.

Item 5F. Information about Contractual Obligations

The table below shows the contractual obligations and commercial commitments as of June 30, 2010:

	0-1 year	>1-<3 years	>3-<5 years	>5 years
Minimum research and development payments	$ 126,083	$	$	$
Operating lease commitments	$ 459,193	$ 661,543	$ 61,560	$
Hire purchase commitments	$ 237,210	$ 145,430	$	$

The Company s purchase obligations are in respect of its subcontracted research and development activities and equipment purchases.

Item 6. Directors, Senior Management and Employees

Item 6.A Directors and Senior Management

The Directors of the Company as of the date of this Annual Report are:

Sidney C. Hack, CPA *(Non-Executive Chairman)*

In office from July 1, 2009 up to the date of this Report

Mr. Hack, 72, was appointed to the Board on November 19, 2008 and was appointed as its Chairman on November 24, 2009. He also serves as Chairman of both the Company s Audit Committee and its Corporate Governance Committee. He is a Certified Practising Accountant and Registered Company Auditor and retired in 2006 after serving 30 years as a senior partner of Hack Anderson & Thomas, Chartered Accountants. Mr. Hack has extensive experience in large company audits, financial planning and taxation and has served on various other Boards during his career.

Tommaso Bonvino, FAICD *(Non-Executive)*

In office from November 25, 2009 up to the date of this Report

Mr. Bonvino, 49, was appointed to the Board on November 25, 2009 and also serves as a member of the Company s Corporate Governance Committee. He has over 27 years experience in consumer marketing and product development and has managed companies for various Italian, Spanish and French firms, distributing and marketing goods throughout South-East Asia. He has established strong bilateral trade relationships between Australian and European companies in the technology and consumer goods sectors. Mr. Bonvino is also currently a non-executive Director of the Melbourne Recital Centre, a Fellow of the Australian Institute of Company Directors and was the former Managing Director and Chief Executive Officer of IM Medical Ltd., an ASX-listed company committed to the use of innovative technology to promote health and well being.

Dr. Malcolm R. Brandon, BScAgr, PhD *(Non-Executive)*

In office from October 5, 2009 up to the date of this Report

Dr. Brandon, 63, was appointed to the Board on October 5, 2009 and also serves as a member of the Company s Audit Committee. He has spent his career in the biotech and life sciences sector where he has over 35 years experience in commercially focused research and development and in building successful companies which have commercialized a wide range of technologies. As the founding director of the Centre for Animal Biotechnology, a research arm within the University of Melbourne Veterinary Science School, he was responsible for fund raising and the development of many agricultural technologies and products. Dr. Brandon was a co-founder and Director of Stem Cell Sciences Ltd. and Smart Drug Systems Inc. and is the Chairman of genetics and artificial animal breeding company Clone International which uses cloning technologies to breed elite cattle, sheep and horses and to preserve the genetics of elite animals.

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Huw D. Jones, BEng (Hons), MBA *(Non-Executive)*

In office from July 1, 2009 up to the date of this Report

Mr. Jones, 47, was appointed to the Board on November 19, 2008. He also serves as a member of the Company s Audit Committee and its Corporate Governance Committee and is currently Executive Director and Chief Executive Officer of Aeris Environmental Ltd., an ASX-listed environmental services company focused on the removal of biological contamination in food cold storage, air-conditioning and commercial water systems. Prior to joining Aeris, he was Managing Director of Datex-Ohmeda Australasia (now part of GE Healthcare).

During the 2010 financial year, Mr. Fred Bart also served as a Director of the Company until his resignation on November 24, 2009.

Senior Management

We have a professional team of qualified and experienced research and development scientists and technicians. The Company currently has 54 full-time-equivalent employees, of which seven have PhD qualifications. The members of Senior Management, and a brief summary of their relevant experience, is as follows:

Dr. Paul D.R. MacLeman, BVSc, MBA, Grad Dip Tech Mgt, Grad Cert Eng, FAICD *(Chief Executive Officer)*

Dr. MacLeman, 44, was appointed as Chief Executive Officer on May 4, 2009. He is a registered veterinary surgeon and holds additional qualifications including an MBA (MGSM), Grad Dip Tech Mgt, Grad Cert Eng and is a member of the AICD. He is the current Chairman of the Ausbiotech Agricultural, Environmental and Industrial Advisory Committee and was most recently Chief Executive Officer of Hatchtech Pty. Limited where he led the company from research through to international Phase II human clinical trials. Dr. MacLeman was responsible for opening up animal health and agricultural opportunities, climaxing in an agreement with one of the top three global chemicals companies. Prior to this, he was Chief Operating Officer of Imugene Ltd. and Vice President at Agenix Ltd. Dr. MacLeman has also previously founded life sciences start-ups and worked in investment banking focusing on the analysis and financing of technology companies.

Thomas G. Howitt, BCom, CA, FTIA, ACIS, AICPA *(Company Secretary and Chief Financial Officer)*

Mr. Howitt, 46, was appointed as the group s first full-time Chief Financial Officer on June 1, 2004 and as its Company Secretary on June 30, 2005. During his 20-plus year career, he has served as CFO and Company Secretary for a number of companies, listed on both the ASX and several foreign stock exchanges. His wide experience covers all facets of financial management and control across a variety of industries, including resources and technology (domestic and international), having been instrumental in the successful development, patenting and subsequent commercialisation of several innovative technologies. He has played key roles in the raising of bank debt and equity capital and the

management of complex due diligence programs and has worked as a senior Taxation Consultant for Ernst & Young and in the investment banking industry. He also serves as President of the Company s Canadian-listed subsidiary, Gtech International Resources Limited.

Alison J. Mew, MSc Hons *(Chief Operating Officer)*

Ms. Mew, 52, was appointed as the Group s Chief Operating Officer on August 31, 2009. Prior to joining the Group, she had extensive experience in the bio-pharmaceutical industry in operations management roles - both in Australia and overseas. Her most recent corporate experience was 13 years with CSL Ltd., in senior executive positions across the Animal Health, Biosciences and Pharmaceutical Divisions - managing vaccines, diagnostics and other biologicals manufacture. Just prior to joining Genetic Technologies Limited, Ms. Mew spent three years providing consulting services in both operational and strategic management areas to both local and international organizations.

Dr. David J. Sparling BVSc Hons, LLB (Hons), Grad Dip Corp Governance *(Vice President Legal and Corporate Development)*

Dr. Sparling, 38, was appointed as the Group s first Vice President Legal and Corporate Development on October 26, 2009. He is an experienced corporate development executive who has been appointed to drive M&A, expansion and strategy development. Dr. Sparling s expertise includes: senior executive management, intellectual property maintenance and defence, licensing, corporate governance, corporate finance and strategic planning. His experience extends to both pharmaceutical and diagnostic applications; in both human and animal health. Prior to joining the Group, Dr. Sparling was chief operating officer for Solbec Pharmaceuticals Ltd., a publicly listed bio-pharmaceutical company based in Perth, Western Australia. Dr. Sparling is also currently a director of Solbec Pharmaceuticals. Prior to this, he was Commercial Counsel for Agenix Limited, a listed biotechnology company in Queensland.

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Gregory J. McPherson BA, BBus *(Vice President Sales and Marketing)*

Mr. McPherson, 46, was appointed as the Group s first Vice President Sales and Marketing on July 20, 2009. He brings over 20 years experience in developing both retail and consumer businesses in Australia and the Asian region, including the development of new retail formats and multi-media campaigns for chains such as Mitre 10, Spotlight and Symbion Health. There, his expertise in multi-site customer operations translated strategy into broad line management accountability. Overseas assignments in Asia for Whirlpool Corporation included setting up Joint Ventures in China and India and Pan-Asian supplier negotiations. Whilst working in Australia, he assisted in the development of manufacturer/wholesalers such as Electrolux, Whirlpool and Brivis/Carrier, where he implemented advanced measurement and process improvement techniques directly increasing profitability and shareholder value.

Ivan Jasenko, BAppSc (Hons) *(Quality and Regulatory Manager)*

Mr. Jasenko, 45, was appointed as the Group s first Quality and Regulatory Manager on August 16, 2010. He has over ten years local and international Biopharmaceutical experience in both human and animal health in Quality and Regulatory roles, particularly with FDA and TGA compliance ranging from the manufacture of vaccines and IVD s to proteins and cell culture. He was appointed to obtain and maintain compliance certification with relevant U.S. and European regulatory authorities for the Group s products. Most recently, he held senior leadership roles with Intervet-Schering Plough and prior to that ICPBio, a publicly listed New Zealand protein biologics manufacturer recently acquired by MP Biomedicals. He is well versed in Asia Pacific, U.S. and European regulatory requirements and GMP/GLP, ISO9001/ISO15189/ISO13485 and 21CFR820 Quality System requirements.

Lewis J. Stuart, BA *(General Manager Phenogen Sciences Inc.)*

Mr. Stuart, 51, was appointed as General Manager Phenogen Sciences Inc. on June 16, 2010. He brings more than 28 years of health sector sales and marketing experience across multiple therapeutic categories including women s health, infectious disease and endocrinology. Mr. Stuart most recently served as Senior Vice President, Commercial Operations at cardiovascular drug developer CV Therapeutics (CVT), where he led the launch of Ranexa and played a significant role in growing CVT s market cap from $300 million to its $1.5 billion acquisition by Gilead. In this role, Mr. Stuart had responsibility for sales, marketing, medical affairs, managed care and investor relations. Prior to CVT, Mr. Stuart held senior sales and marketing positions within the biotechnology sector, including six years as Vice President, Sales at Agouron Pharmaceuticals, Inc., a Pfizer company. Earlier in Mr. Stuart s career, he directed the sales teams for several cardiovascular products at Bristol Myers Squibb, Inc. and has also held senior sales and marketing positions with Solvay Pharmaceuticals, Centocor and Upjohn.

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Item 6.B Compensation

Details of the nature and amount of each major element of the compensation of each director of the Company and each of the named officers of the Company and its subsidiaries, for services in all capacities during the financial year ended June 30, 2010 are listed below. All figures are stated in Australian dollars (AUD).

Name and title of Directors	Year	Short-term Salary/fees $	Other $	Post-employment Superannuation $	Long-term Long service leave $	Share-based Options $	Totals $
Sidney C. Hack (note 1)	**2010**	**16,474**		**51,077**			**67,551**
Non-Executive Chairman	2009			33,583			33,583
Tommaso Bonvino (note 2)	**2010**	**29,935**		**2,694**			**32,629**
Non-Executive Director	2009						
Dr. Malcolm R. Brandon (note 3)	**2010**	**37,115**		**3,340**			**40,455**
Non-Executive Director	2009						