As filed with the U.S. Securities and Exchange Commission on December 18, 2019.

Registration Statement No. 333-235542

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

Amendment No. 1

to

Form F-1

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Genetic Technologies Limited

(Exact name of Registrant as specified in its charter)

Not Applicable

(Translation of Registrant's name into English)

Australia	**2386**	**Not Applicable**
(State or other Jurisdiction of Incorporation or Organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

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

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

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

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Alison Newman, Esq. **Zev Bomrind, Esq.** **Fox Rothschild LLP** **101 Park Avenue** **New York, NY 10178** **(212) 878-7997**	**Barry I. Grossman, Esq.** **Sarah E. Williams, Esq.** **Ellenoff Grossman & Schole LLP** **1345 Avenue of the Americas** **New York, NY 10105** **(212) 370-1300**

Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement becomes effective.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended, check the following box. ☐

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act:

Emerging growth company ☐

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards† provided pursuant to Section 7(a)(2)(B) of the Securities Act. ☐

† The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

CALCULATION OF REGISTRATION FEE

TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE(2)(3)	AMOUNT OF REGISTRATION FEE(4)
Ordinary shares, no par value per share, represented by American Depositary Shares (1)	$ 10,000,000.00	$ 1,298.00(5)

(1) American Depositary Shares (as evidenced by American Depositary Receipts, or ADRs, each representing 600 ordinary shares).

(2) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(o) of the Securities Act of 1933, as amended (the "Securities Act").

(3) Includes ordinary shares represented by American Depositary Shares, or ADSs, that are issuable upon exercise of the underwriters' over-allotment option to purchase additional shares.

(4) Calculated pursuant to Rule 457(o) based on an estimate of the proposed maximum aggregate offering price.

(5) Previously paid.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to such Section 8(a), may determine.

EXPLANATORY NOTE

This amendment is being filed solely to file certain exhibits to the Registration Statement.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Unless otherwise indicated, all references to “Genetic Technologies “ or the “company,” “we,” “our,” “us” or similar terms refer to Genetic Technologies Limited and its subsidiaries.

Item 6. Indemnification of Directors and Officers.

Except as hereinafter set forth, there is no provision of the Company’s Constitution or any contract, arrangement or statute under which any director or officer of the Company is insured or indemnified in any manner against liability which he may incur in his capacity as such.

Rule 22 of the Company’s Constitution provides:

To the extent permitted by law, the Company shall indemnify each person who is or has been an officer of the Company or an officer of a related body corporate of the Company, on a full indemnity basis against any liability incurred by the person:

- in his capacity as an officer of the Company or a related body corporate; and
- to a person other than the Company or a related body corporate of the Company, unless the liability arises out of conduct of the officer which involves a lack of good faith.

To the extent permitted by law, the Company shall indemnify each person who is or has been an officer of the Company or an officer of a related body corporate of the Company, on a full indemnity basis against any liability for costs and expenses incurred by the person in connection with proceedings involving the person in his or her capacity as an officer of the Company or a related body corporate.

The Company may:

- enter into, or agree to enter into; and
- pay, or agree to pay, a premium in respect of,

a contract insuring a person who is or has been an officer of the Company or of a related body corporate of the Company against a liability incurred by the person as such an officer, except in circumstances prohibited by the Law.

Without limiting a person’s right under this Rule 22, the Company may enter into a deed agreeing with the person to give effect to the rights of the person conferred by this rule or the exercise of a discretion under this rule, on such terms and conditions as the directors think fit and which are not inconsistent with this Rule 22.

This Rule 22 does not limit any right the person otherwise has.

In this Rule 22, an officer means a director or secretary of the Company and such other persons as the directors decide from time to time.

The Company maintains liability insurance policies insuring the Company’s directors and officers against certain liabilities that they may incur in such capacities.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Company pursuant to the charter provision, by-law, contract, arrangements, statute or otherwise, we have been informed that, in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

Item 7. Recent Sales of Unregistered Securities.

During the prior three years, we issued and sold to third parties the securities listed below without registering the securities under the Securities Act of 1933, as amended (the "Securities Act") pursuant to Section 4(a)(2) thereof and Regulations D and S thereunder. None of these transactions involved any public offering. All our securities were sold through private placement either (i) outside the United States or (ii) in the United States to a limited number of investors in transactions not involving any public offering. As discussed below, we believe that each issuance of these securities was exempt from, or not subject to, registration under the Securities Act.

On October 29, 2019, the Company completed a rights offering to the holders of its ordinary shares in which it issued 1,125,000,000 ordinary shares at an issue price of A$0.004, resulting in gross proceeds to the Company before transaction costs of A$4,500,000. Lodge Corporate acted as the underwriter in the rights offering with respect to A$4,000,000 of the A$4,500,000 total proceeds raised in the rights offering, and was paid a commission of 2% of A$4,000,000. In addition, Lodge Corporate and sub-underwriters in the Rights Offering became entitled to be issued three-year options to purchase an aggregate of 500,000,000 ordinary shares at an exercise price of A$0.008 per ordinary share. The sub-underwriters of the underwritten portion of the Rights Offering included Peter Rubinstein and Dr. Jerzy Muchnicki, who will each be issued options to purchase 125,000,000 ordinary shares.

In addition, the Company sold securities in the three prior fiscal years as follows:

Date	Details	Issue Price AUD$	Total Value AUD$
May 6, 2019	72,596,869 ordinary shares issued to Kentgrove Capital Growth Fund	$ 0.00676	490,755
October 24, 2018	100,000,0000 ordinary shares issued to Kentgrove Capital Growth Fund	$ 0.0135	1,350,000
August 8, 2018	108,833,100 ordinary shares issued to Kentgrove Capital Growth Fund	$ 0.0113	1,229,814

Item 8. Exhibits and Financial Statement Schedules.

Exhibit Number	Description
Exhibit 1.1	Form of Underwriting Agreement (to be filed by amendment)
Exhibit 3.1	Constitution (incorporated by reference to Exhibit 1.1 of the Company's Registration Statement on Form 20-F filed with the Commission on December 21, 2010)
Exhibit 4.1	Deposit Agreement, dated as of January 14, 2002, by and among Genetic Technologies Limited, The Bank of New York Mellon, as Depositary, and the Owners and Holders of American Depositary Receipts (incorporated by reference to Exhibit 1 of the Company's Registration Statement on Form F-6 relating to the ADSs filed with the Commission on September 12, 2012)
Exhibit 4.2	Form of American Depositary Receipt (incorporated by reference to Rule 424(b)(3) filing (File No. 333-183861), filed with the Commission on August 15, 2019)
Exhibit 5.1	Opinion of K&L Gates (to be filed by amendment)
Exhibit 10.2	License and Services Agreement, dated November 29, 2016, between The University of Melbourne and Genetic Technologies Limited (filed herewith)
Exhibit 10.3	Collaborative Research Agreement between Memorial Sloan Kettering Cancer Center; The Chancellor, Masters and Scholars of the University of Cambridge; and Phenogen Sciences, Inc. (filed herewith)
Exhibit 10.4	Master Collaboration Agreement, dated September 13, 2019, between Genetic Technologies Limited and The Translational Genomics Research Institute (filed herewith)
Exhibit 10.5	Exhibit A-1 entered into under Master Collaboration Agreement, dated September 13, 2019, between Genetic Technologies Limited and The Translational Genomics Research Institute (filed herewith)
Exhibit 23.1	Consent of PricewaterhouseCoopers, Independent Registered Public Accounting Firm (previously filed)
Exhibit 23.2	Consent of K&L Gates (to be included in Exhibit 5.1)
Exhibit 24.1	Power of Attorney (filed herewith as part of the signature page)

Financial Statement Schedules.

All financial statement schedules are omitted because the information required to be set forth therein is not applicable or is shown in the consolidated financial statements or the notes thereto.

Item 9. Undertakings.

(a) The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement, certificates in such denominations and registered in such names as required by the underwriter to permit prompt delivery to each purchaser

(b) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the U.S. Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

(c) The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Melbourne, Victoria Australia, on the 18th day of December, 2019.

GENETIC TECHNOLOGIES LIMITED

By: /s/ Dr. Jerzy Muchnicki
Dr. Jerzy Muchnicki
Interim Chief Executive Officer and Director

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Dr. Jerzy Muchnicki Dr. Jerzy Muchnicki	Interim Chief Executive Officer (Principal Executive Officer)	December 18, 2019
/s/ Phillip Hains Phillip Hains	Chief Financial Officer (Principal Financial Officer)	December 18, 2019
/s/ Dr. Lindsay Wakefield Dr. Lindsay Wakefield	Director	December 18, 2019
/s/ Peter Rubinstein Peter Rubinstein	Director	December 18, 2019
/s/ Nick Burrows Nick Burrows	Director	December 18, 2019

Authorized U.S. Representative

Pursuant to the requirement of the Securities Act of 1933, the undersigned, the duly authorized representative in the United States of Genetic Technologies Limited, has signed this registration statement in the City of Newark, Delaware, on December 18, 2019.

By: /s/ DONALD J. PUGLISI
Name: Donald J. Puglisi
Title: Managing Director
Authorized Representative in the United States

Exhibit 10.2

Licence and

Services Agreement

The University of Melbourne
Genetic Technologies Limited

Date November 29, 2016

Parties

Name	**The University of Melbourne**
ABN	84 002 705 224
Short form name	**University**
Notice details	The University of Melbourne Vic 301O Facsimile+ 61 3 9349 4695 Contact person: General Counsel

Name	**Genetic Technologies Limited**
ABN	17 009 212 328
Short form name	**GTG**
Notice details	Genetic Technologies Limited, 60 Hanover Street, Fitzroy, Victoria 3065 Facsimile+ 61 3 8412 7040 Contact person: Chief Executive Officer

BACKGROUND

A. The University owns the Background IP.

B. GTG wants to licence the Background IP in order to develop and commercialise novel diagnostics for colorectal cancer.

C. GTG wishes to engage, and the University has agreed to be engaged, to provide the Services to GTG to assist with its development and commercialisation of colorectal cancer diagnostics.

D. The University and GTG want to record their understanding in accordance with the terms and conditions of this Agreement.

AGREED TERMS

1. DEFINITIONS AND INTERPRETATION

1.1 **Definitions**

Affiliate means any:

(a) holding company;

(b) subsidiary company ; or

(c) subsidiary company of a holding company; or

(d) other related body corporate; of GTG.

Agreement means this licence and services agreement together with any schedules or annexures and any amendments made in accordance with this Agreement.

Background IP means the University Patents and the Know How.

Business Day means any day other than a Saturday, Sunday, public holiday or a University holiday as indicated in the University calendar (as amended from time to time) at the place where the activity in question occurred or is to occur.

Claim includes any claim, Cost, demand, remedy, suit, injury, damage, loss, liability , action, proceeding , right of action, and claim for compensation.

Code has the meaning give to it by clause 13.3.

Confidential Information means information that:

(a) is by its nature confidential;

(b) is designated by the Disclosing Party as confidential; or

(c) Receiving Party knows or ought to know is confidential;

and includes without limitation the terms of this Agreement and all information about the parties which is made available or which becomes known during the Term or as a result of entering into this Agreement but does not include information which:

(d) was in public domain at the time of its provision by the Disclosing Party; or

(e) became part of the public domain after its provision by the Disclosing Party or its creation by the Disclosing Party.

Cost includes any reasonable and proper cost, charge, expense, outgoing, payment or other expenditure of any nature whatever, including, where appropriate, all legal fees.

Default Rate means two (2) percentage points per annum above the official cash interest rate fixed by the Reserve Bank of Australia from time to time.

Developed IP means Intellectual Property which is created, developed or discovered by either or both of the parties with reference to or as a result of the Background IP or the Work Program IP, but not including the Background IP or the Work Program IP.

Development Plan means the plan for GTG to develop and Exploit the Products, the initial version of which is set out in Schedule 2.

Disclosing Party means the party that is disclosing Confidential Information.

Expenses mean the following costs and expenditures reasonably and actually paid or allowed:

(a) direct Taxes applied on the sale or supply of Products;

(b) freight, shipment and insurance costs incurred for transportation in respect of any sales or supply of Products; and

(c) all amounts refunded or credited for a Product which was rejected, spoiled, damaged, out of date or returned.

Exploit means to use, have used, manufacture, have manufactured, sell, have sold, offer for sale, have offered for sale, import and have imported, or otherwise exploit a Product, or to sub-licence any person to do any of those things, and **Exploitation** h as a corresponding meaning.

Field means diagnostic testing in part or in whole for the diagnosis of colorectal cancer.

Final Work Program Report means the final report that must be provided by the University to GTG at the conclusion of the Work Program, which report must set out the results of the Work Program.

First Licence Fee has the meaning given to it by Item 2 of Schedule 1.

Governmental Agency means any government or any governmental, semi-governmental or judicial entity or authority. It also includes any self-regulatory organisation established under statute or any stock exchange.

GTG IP: means any Intellectual Property provided to the Work Program or in the Products by GTG that is owned solely by GTG and notified by GTG to the University in writing at the time it is provided and is not disputed by the University in accordance with this Agreement.

Insolvency Event means, in relation to a party where:

(a) the party is or states that it is unable to pay all its debts as and when they become due and payable;

(b) the party is taken or will be presumed to be insolvent or unable to pay its debts under any applicable legislation;

(c) an application or order is made for the winding up or dissolution or a resolution is passed or any steps are taken to pass a resolution for the winding up or dissolution of the party;

(d) an administrator, provisional liquidator, liquidator or person having a similar or analogous function under the laws of any relevant jurisdiction is appointed in respect of the party or any action is taken to appoint any such person and the action is not stayed, withdrawn or dismissed within seven days;

(e) a receiver or receiver and manager is appointed in respect of any property of the party;

(f) the party is deregistered or notice of its proposed deregistration is given to the party;

(g) the party enters into or takes any action to enter into an arrangement (including a scheme of arrangement or deed of company arrangement), composition or compromise with, or assignment for the benefit of, all or any class of the party's creditors or members or a moratorium involving any of them; or

(h) anything analogous to or of a similar effect to anything described above under the law of any relevant jurisdiction occurs in respect of the party.

Intellectual Property means all rights resulting from intellectual activity whether capable of protection by statute, common law or in equity and including copyright, discoveries, inventions, patent rights, registered and unregistered trade marks, design rights, circuit layouts and plant varieties and all rights and interests of a like nature including but not limited to methods and techniques, together with any documentation relating to such rights and interests.

Item means the relevant item number in the Schedule to this Agreement.

Know How means all unpatented technical information and know-how which meets each of the following criteria:

(a) not in the public domain (other than as a direct or indirect result of a breach of an obligation of confidentiality;)

(b) controlled solely by the University;

(c) not the subject of any rights in favour of any third party; and

related to, and desirable for, the Exploitation of the Products and which was developed by either of the research groups led by the Researchers prior to the Commencement Date.

Law includes any requirement of any statute, acts, regulations, rule, regulation , proclamation, ordinance , orders or directives of Governmental Agency or local law, present or future, and whether State, Federal or otherwise.

Licence means the licence granted by the University to GTG pursuant to clause 4.1.

Licence Fees mean the amounts GTG is obliged to pay to the University in accordance with clause 6.2 and described in Item 2 of Schedule 1, comprising the:

(a) First Licence Fee; and

(b) Second Licence Fee.

Net Revenue means the invoiced price of Products sold and/or services provided by GTG or any of its sub-licensees to third parties in arm's length transactions exclusively for money or, where the sale or provision of services is not at arm's length, the price that would have been so invoiced if it had been at arm's length, after deduction of all documented:

(a) normal trade discounts actually granted and any credits actually given for rejected or returned Products;

(b) costs of packaging, insurance, carriage, and freight, provided in each case that the amounts are separately charged on the relevant invoice;

(c) Goods and service tax (GST) or other sales tax; and

(d) import duties or similar applicable government levies.

Product means any product, process or service that uses or incorporates any part of the University Patents or would not have been developed or created but for the Know How or relates to the Field.

Receiving Party means the party that is receiving Confidential Information.

Representative means a representative of a party appointed pursuant to clause 18.1.

Researchers means John Hopper and Mark Jenkins.

Royalty means the royalty payable by GTG to the University in accordance with clause 6.3 and described in Item 3 of Schedule 1 to this Agreement and **Royalties** has a corresponding meaning.

Royalty Period means any period of 3 calendar months during the Term being from:

(a) 1 January to 31 March; and

(b) 1 April to 30 June; and

(c) 1 July to 31 September ; and

(d) 1 October to 31 December;

provided that the first Royalty Period commences on the date of first sale of a Product and ends on the immediately following end of that Quarter.

Royalty Statement means a royalty statement provided by GTG under clause 7.2.

Second Licence Fee has the meaning given to it by Item 2 of Schedule 1.

Service Fees means the amounts GTG is obliged to pay to the University in accordance with clause 6.1 and described in Item 1 of Schedule 1.

Services means the services that must provided by the University to GTG under this Agreement, comprising the execution of the Work Program and the provision of the Final Work Program Report to GTG.

SNP means single nucleotide polymorphism.

Start Date means the date the last party signs this Agreement.

Sub-Licence means a sub-licence granted by GTG pursuant to this Agreement.

Sub-Licensee means a person to whom GTG has granted a Sub-Licence.

Tax includes any tax, levy, impost, deduction, charge, rate, duty, compulsory loan or withholding that is levied or imposed by a Governmental Agency.

Term means :

(a) in respect of the Services, from the Start Date until the provision by the University of the Final Work Program Report to GTG;

(b) in respect of the Licence and all other obligations under this Agreement that are not directly relevant to the Services, from the Start Date until the latter of:

(i) Twenty (20) years after the Start Date;

(ii) expiration of the last to expire of the University Patents in any jurisdiction in the Territory; or

(iii) the last Royalty Period;

unless terminated earlier in accordance with this Agreement.

Territory means the world.

Unforeseen Event means any event that is reasonably unforeseeable and beyond the University's control such as fire, lightning, explosions, flood, subsistence, insurrection or civil disorder or military operations, terrorism, government or quasi-government restraint , expropriation, prohibition, intervention, direction or embargo, inability or delay in obtaining governmental or quasi-governmental approvals, consents, permits, licences or authorities, strikes, lock-outs or industrial disputes of any kind and any other cause.

University Patents means:

(a) Australian provisional patent application entitled, "Methods for assessing the risk of developing colorectal cancer", application no. 2016900254;

(b) Australian provisional patent application entitled, "Methods for assessing risk of developing colorectal cancer", application no. 2016903246;

(c) any patent within the patent family and claiming a priority date of a patent or patent application referred to in (a) or (b);

(d) any continuation, continuation in part, division, re-issue or substitution of any of (a) or (b) or (c); and

(e) any patent granted or applied for by the University or its nominee in order to protect the Work Program IP.

Valid Claim means in respect of a University Patent, either:

(a) a claim of an issued and un-expired granted University Patent which (i) has not been permanently revoked or found to be unenforceable or invalid by a decision of a court or other governmental agency of competent jurisdiction, such decision being an unappealable or un-appealed within the time allowed for appeal, and (ii) which has not been admitted by the University or any nominee patent holder to be invalid or unenforceable through reissue or disclaimer or otherwise; or

(b) a claim of a pending application which claim has not been abandoned or finally disallowed without the possibility of appeal or re-filing of the application.

Work Program means the targeted research program that must be executed by the University as part of the Services, the intention of which is to assist with the development of a diagnostic test for colorectal cancer based and the components of which are described in Item 4 of Schedule 1.

Work Program IP means all rights resulting from intellectual activity whether capable of protection by statute, common law or in equity and including copyright, discoveries, inventions, patent rights, registered and unregistered trade marks, design rights, circuit layouts and plant varieties and all rights and interests of a like nature including but not limited to methods and techniques, together with any documentation relating to such rights and interests arising from the Work Program. For the avoidance of doubt, Work Program IP includes all rights relating to any additional SNPs related to colorectal cancer identified during the Work Program.

1.2 Interpretation

The following rules apply unless the context requires otherwise:

(a) the word person and words importing persons include firms, bodies corporate, unincorporated associations and authorities;

(b) a reference to any agreement, document or instrument includes that agreement, document or instrument as amended from time to time;

(c) a reference to an Act of Parliament or section or schedule of an Act of Parliament will be read as if the words "or any statutory modification, amendment, consolidation or re-enactment thereof or substitution therefore" were included in that reference;

(d) headings are included for convenience only and do not affect the interpretation of this Agreement;

(e) words importing the singular include the plural and vice versa; words involving gender include the other gender and words having a particular meaning have corresponding meanings in other parts of speech and grammatical forms;

(f) a reference to a person includes a reference to the person's executors, administrators, successors, substitutes (including, but not limited to, persons taking by novation) and permitted assigns;

(g) an agreement, representation or warranty on the part of or in favour of 2 or more persons binds or is for the benefit of them jointly and severally;

(h) if a period of time is specified and dates from a given day or the day of an act or event, it is to be calculated exclusive of that day; and

(i) a reference to a day is to be interpreted as the period of time commencing at midnight and ending 24 hours later.

U) a reference to $ means Australian dollars

(k) a reference to a clause or schedule is a reference to a clause of, or a schedule to, this Agreement.

(I) reference to legislation or to a provision of legislation includes a modification or re-enactment of it, a legislative provision substituted for it and a regulation or statutory instrument issued under it.

(m) reference to "writing" includes a facsimile transmission and any means of reproducing words in a tangible and permanently visible form.

2. TERM

2.1 Duration of Agreement

This Agreement commences on the Start Date and continues for the Term, unless extended or terminated in accordance with this Agreement.

3. SERVICES

In consideration for the payment of the Service Fees by GTG to the University, the University must:

(a) provide the Services to GTG;

(b) carry out the Services to the best of its ability;

(c) devote its reasonable efforts and attention to the performance of the Services; and

(d) carry out the Services in a timely and professional manner.

4. LICENCE

4.1 Grant of Licence

In consideration of the Licence Fees payable by GTG to the University, the University grants GTG during the Term:

(a) an exclusive licence to:

(i) the Background IP, consisting of the University Patents and the Know-How; and

(ii) any Work Program IP;

(b) in the Territory;

(c) in the Field;

(d) for the purposes of Exploiting any Product in accordance with the Development Plan and otherwise with the terms of this Agreement;

subject to clause 4.2.

4.2 Retention of University Rights

The Licence granted to GTG in clause 4.1 does not include or affect the perpetual right of the University to use in its discretion, the Background IP for non-commercial teaching, education and research purposes, whether alone or in collaboration with third parties for non-commercial purposes, and the University will retain that right notwithstanding anything written elsewhere in this Agreement.

5. SUB-LICENSING

5.1 GTG may sub-licence

(a) Subject to obtaining the prior written consent of the University, whose consent will not be unreasonably withheld, GTG may grant sub-licenses to third parties for the purposes of enabling them to Exploit any Product on the terms of this Agreement.

(b) GTG will ensure that any sub-licence it grants:

(i) is on an arms-length basis reflecting the market value of the rights granted;

(ii) is on substantially the same terms as the terms of this Agreement (except insofar as the terms of this Agreement relate to the Services to be provided by the University to GTG, which terms will not form part of any sub-licence granted by GTG);

(iii) includes an acknowledgement from the sub-licensee that the University owns the University Patents;

(iv) acknowledges the University's retention of rights in clause 4.2;

(v) prohibits the sub-licensee from taking any action or allowing any action to be taken which may detract from the University's ownership of the University Patents;

(vi) requires the sub-licensee to maintain all books, records and accounts necessary to enable verification of the amount of royalties and other income required to be paid by the sub-licensee to GTG;

(vii) entitles the University to reasonable access to all books records and accounts, including any records and books maintained as data on a computer system;

(viii) expires at or prior to the expiry of the Term and provides for the sub-licence to terminate automatically upon the termination of this Agreement;

(ix) **is** in writing in the English language, executed by the sub-licensee and giving its place of business;

(x) cannot be assigned without the written consent of the University;

(xi) includes a clause excluding and limiting the liability of the University that is at least equivalent to the exclusion and limitation of liability included in this Agreement; and

(xii) will not allow the sub-licensee to further licence all or any part of the University Patents.

(c) GTG must provide the University with a true copy including all financials of each sub-licence entered into and any variations to that sub-licence within thirty (30) Business Days of that sub-licence being entered into.

(d) GTG must ensure that each sub-licenseecomplies with the requirements set out in clause 5.1(b). GTG must monitor the performance of each sub-licensee and promptly notify the University if it becomes aware of any breach of those terms. Any breach by a sub-licensee of those terms is deemed to be a breach of this Agreement by GTG.

6. PAYMENTS BY GTG

6.1 Service Fees Payable by GTG

In consideration of being provided with the Services by the University, GTG must pay the Service Fees to the University at the times and in the manner prescribed in Item 1 of Schedule 1 to this Agreement.

6.2 Licence Fees payable by GTG

In consideration of the Licence granted by the University under clause 4.1, GTG, its Affiliates and any of its sub-licensees (if any) must pay the Licence Fees to the University at the times and in the manner prescribed in Item 2 of Schedule 1 to tnis Agreement.

6.3 Royalties payable by GTG

(a) In consideration of the Licence granted by the University under clause 4.1, in addition to the Licence Fees, GTG will within thirty (30) days of the end of each Royalty Period pay the Royalties to the University at the times and in the manner prescribed by Item 3 of Schedule 1 to this Agreement.

(b) The parties acknowledge and agree that, of the Royalties described in Item 3 of Schedule 1:

(i) 50% of the total amount of Royalties payable under Item 3(a) are in connection with the Licence granted to GTG in respect of the University Patents, and the other 50% of the Royalties payable under Item 3 (a) are in connection with the Licence granted to GTG in respect of the Know How; and

(ii) 100% of the total amount of Royalties payable under Item 3(b) are in connection with the Licence granted to GTG in respect of the Know How.

6.4 Manner of Payments

All payments made by GTG under this Agreement will be:

(a) payments in Australian dollars in immediately available, freely transferable, cleared funds to the University's nominated bank account; and

(b) without any set-off or deduction of any kind, including any Tax or other withholdings whatsoever.

6.5 Reasonable Endeavours

GTG must use its reasonable endeavours to collect and receive all money owing and payable to the University pursuant to this Agreement.

6.6 Late Payments

If GTG fails to pay any amount due under this Agreement on or prior to the due date, it will pay interest on that amount at the Default Rate from the date due until the date of payment.

7. REPORTING AND AUDITING

7.1 GTG to keep books

GTG will keep at its registered office comprehensive and true books of account and records which in accordance with generally accepted accounting practice disclose details of all:

(a) Net Revenue of GTG (including details of the basis of calculating that Net Revenue);

(b) sub-licences granted by GTG in accordance with clause 5.1 of this Agreement; and

(c) Exploitation activities.

7.2 Royalty Statements

With each payment of Royalties, GTG will provide the University a comprehensive and true report certified by its auditor or a director explaining the basis of calculation of Net Revenue

and the Royalties payable for each Royalty Period under this Agreement **(Royalty Statement).**

7.3 General Reporting

(a) In addition to its obligation under clause 7.2, at the same time as it provides each Royalty Statement GTG will provide the University a comprehensive and true report of:

(i) the Exploitation activities of GTG pertaining to the Products and any Sub-Licensing activities for the preceding year during the Term;

(ii) the proposed Exploitation activities of GTG pertaining to the Products and any Sub-Licensing activities for the following year during the Term;

(iii) the details of all Sub-Licences; and

(iv) any other matter pertaining to Exploitation required by the University.

(b) GTG must otherwise keep the University advised of any decision of GTG that may affect Exploitation, including but not limited to the decision to cease Product development, at which point this Agreement may be terminated by the University in accordance with clause 17.2(a)(i).

7.4 University Right of Audit

The University may once in each year during the Term and for seven (7) years thereafter, during normal business hours on a Business Day with at least five (5) Business Days' Notice to GTG, access, inspect and copy accounts and records limited only to those accounts and records required to verify the accuracy of the Royalty payments required under this Agreement and GTG's compliance with this Agreement.

7.5 Costs of Audit

(a) Subject to clause 7.5(b), the University will pay for the cost of the inspection and making excerpts from and copies of GTG' accounts and records.

(b) If an inspection shows under-reporting or underpayment by GTG of any amount to the University by more than 3% for any Royalty Period, GTG will reimburse the University for the cost of the inspection and making excerpts from and copies of GTG' accounts and records and pay to the University any amount due within thirty (30) days of notice by the University to GTG.

8. GENERAL OBLIGATIONS OF GTG

8.1 Reasonable efforts to Exploit

GTG will (and must ensure that its Affiliates and any Sub-Licensee will) in good faith use its reasonable efforts to Exploit the Products.

8.2 Development Plan

(a) At least annually, GTG must provide an updated copy of the Development Plan to the University which:

(i) reports on all activities that GTG has conducted under the Licence Agreement since the previous Development Plan was instituted;

(ii) sets out the projected dates for any milestones to be achieved; and

(iii) sets out the past, current and projected activities that GTG has or will undertake to maximise Product sales.

(b) The University must review any updated Development Plan it receives from GTG within thirty (30) days of its receipt of that document and either:

(i) approve that updated Development Plan in writing to GTG; or

(ii) require GTG to make reasonable amendments to the Development Plan within a further thirty (30) days in order for the University to approve that plan,

at which point the updated Development Plan will be deemed incorporated by reference into this Agreement and be binding on the Parties.

8.3 Negative Obligations

GTG will not (and must ensure that its Affiliates and any sub-licensee will not):

(a) act as agent of the University nor indicate that it is acting other than as principal;

(b) make any representation or give any warranty on behalf of the University or any personnel of the University;

(c) refer to the University in any labels, packaging, advertising or promotional materials for any Product without the prior written consent of the University.

8.4 Positive Obligations

Without limiting any obligation of GTG under clause 9.1, GTG will (and must ensure that its Affiliates and any sub-licensees will):

(a) develop the Products;

(b) obtain all approvals for the Products as required under clause 9.1;

(c) comply with all applicable Laws relating to Exploitation;

(d) maximise Product sales;

(e) maximise Royalties; and

(f) comply with the Development Plan,

for the mutual benefit of the University and GTG having regard to all relevant commercial and economic factors.

9. REGISTRATION AND APPROVALS

9.1 Statutory approvals for Exploitation

GTG (and its Affiliates and any sub-licensees) is responsible for and will, at its own expense, apply for, obtain and maintain all statutory, regulatory administrative or governmental approvals, consents and registrations required by Law to be obtained in connection with Exploitation of any Product in the Territory.

10. OWNERSHIP OF INTELLECTUAL PROPERTY

10.1 Ownership of Intellectual Property generated through Work Program

The University will own all right, title and interest to all of the Work Program IP and the Final Work Program Report it provides to GTG, and GTG must not Exploit or otherwise deal with that Intellectual Property in any manner not expressly authorised in writing by the University.

10.2 Ownership of Background IP

(a) The University owns the BackgroundIP and nothing in this Agreement is intended to convey to GTG any ownership in the BackgroundIP.

(b) GTG will not represent that it has any ownership rights in the Background IP , or challenge the validity of any Background IP or contest or impair the University's ownership of the Background IP in any way.

10.3 Ownership of Developed IP

(a) On and from its creation, all right, title and interest in any Developed IP will automatically vest in the parties as joint tenants in undivided shares in proportion percentages equivalent to the respective contributions made by each party to the creation of that Developed IP. For the avoidance of doubt, if a party has not made any contribution to the creation of any Developed IP, no right, title or interest in or to that Developed IP will vest in that party, and the other party will be the sole owner of that Developed IP.

(b) Where either party intends to commercialise any jointly owned Developed IP, it must provide prior written notice of its intentions to the other party. Upon receipt of such written notice, the parties without unreasonable delay must enter into good faith negotiations and use their reasonable endeavours to enter into a licence or similar agreement to record the terms on which the non-commercialising party will licence its ownership proportion to the other party in order for that jointly owned Developed IP to be commercialised.

(c) At least once in every 6 month period during the Term, the parties must meet and agree upon any Developed IP that has been created during the immediately preceding period, and update the details of that Developed IP, including the proportionate ownership interest of each party in and to that Developed IP, in a written register that must be signed *off* by a representative of each party within 30 days of each meeting, and which will be incorporated by reference into this Agreement and binding on each party. Any dispute between the parties in relation to the details or ownership of any Developed IP must be dealt with in accordance with the dispute resolution provisions set out in clause 20 of this Agreement.

11. RIGHT OF FIRST REFUSAL TO WORK ON FURTHER SNPS

Where, after the Start Date, additional SNPs related to colorectal cancer are identified and GTG wishes to undertake any research or development activities in relation to those SNPs, it must provide formal written notice of its intentions to the University and the parties must then endeavour in good faith to negotiate terms and enter into such agreements as are necessary in order for the University to undertake all of those research and development activities not undertaken by GTG itself, and GTG must not approach, hold discussions with or any enter any arrangement with any third party to undertake those activities. If, after a period of 90 days (or such longer period as may be agreed between the parties), the parties cannot agree upon the terms on which the University will undertake research and development activities in relation to those additional SNPs, then GTG may approach, hold discussions with or enter into an arrangement with any third party to undertake those activities, provided that in the 12 month period after negotiations between GTG and the University are terminated, GTG must not enter into any arrangement with any third party on terms more favourable than those last offered by GTG to the University to undertake those activities.

12. ENFORCEMENT OF INTELLECTUAL PROPERTY RIGHTS

12.1 Responsibility for maintenance and protection of University Patents

During the Term:

(a) all reasonable steps must be taken to apply for, obtain and maintain the University Patents, in the name of the University and no other person;

(b) subject to clause 12.1(c), GTG will be responsible for the application, maintenance, prosecution, defence and enforcement of the University Patents in the name of the University and no other person, on the terms of this Agreement;

(c) in relation to the application, maintenance, prosecution, defence and enforcement of the University Patents, GTG must:

(i) keep the University advised of any and all developments thereon; and

(ii) consult with the University in good faith, and take into consideration the opinion and interests of the University, in advance of taking or omitting to take any material action.

(d) all Costs associated with any actions required pursuant to sub-clauses12.1(a) will be paid for by GTG either directly or by reimbursing the University for those Costs ;

(e) GTG must provide the University with copies of all correspondence in relation to its obligations under this clause 12.

12.2 Each Party to advise and consult with the other

(a) Each party will promptly inform the other in writing of:

(i) any application, maintenance, prosecution, defence, enforcement, infringement or threatened infringement relating to the University Patents;

(ii) any unauthorised use of or exercise of University Patents of which it becomes aware; or

(iii) any threat against the validity of University Patents or a party's rights to use the Patents as contemplated by this Agreement of which it becomes aware.

(b) If there is an infringement of the University Patents or any right with respect to the Patents, each party will:

(i) keep the other party advised of the status of the infringement, the actions and positions taken by the complainant and action taken or proposed to be taken;

(ii) consult with and take into consideration the opinion and interests of the other party.

12.3 Procedure for defending or instituting proceedings

If any complaint alleging infringement of University Patents is made the following procedure applies:

(a) where a party becomes aware that any person alleges that the University Patents is invalid or infringes any rights, the party that has become aware of the matter will promptly advise the other party giving full particulars;

(b) the parties may jointly institute or defend litigation, in which case the parties must agree to the manner in which they will share payment of any damages, costs or awards in relation to such proceedings. If the University declines to jointly enter such proceedings, GTG will have the right, but not the obligation, to institute or defend proceedings involving the University Patents at its sole cost and, if any damages, costs or any other monetary amounts are awarded to GTG as a result of those proceedings, then any external costs incurred by GTG in direct connection with those proceedings will be deducted from those awarded amounts and the net amount will be deemed revenue received by GTG as a result of a Sub-Licence;

(c) If both the University and GTG elect not to defend any proceedings involving a University Patent reasonably required for GTG's Exploitation then the Licence will immediately terminate; and

(d) GTG will not settle any action against it without the consent of the University (who will not unreasonably withhold or delay such consent) and will provide the University with copies of all evidence and any necessary information reasonably required by the University relating to the litigation.

12.4 University's right to defend or institute proceedings

(a) If GTG elects not to institute or defend proceedings involving the University Patents it will immediately notify the University of its decision.

(b) On receipt of the notice contemplated by clause 12.4(a), the University in its absolute discretion will have the right, but not the obligation, to institute proceedings involving the University Patents at its sole cost and, if any damages, costs or any other monetary amounts are awarded to the University as a result of those proceedings, they will belong solely to the University.

12.5 If neither party institutes or defends

If both the University and GTG elect not to institute or defend any proceedings involving part of the University Patents then:

(a) that part of the University Patents which is or are the subject of the Claim may be excised from the Licence;

(b) the University will bear the Costs of any such proceedings including any damages or costs awarded in favour of the University; and

(c) the University will be solely entitled to the benefit of any such proceedings including any damages or costs awarded in favour of the University.

12.6 Reasonable Assistance

If either party elects to institute or defend any action pertaining to the University Patents then the other party must give the party bringing or defending that action all reasonable assistance (including, in the case of the University, providing GTG with any reasonable written authority to conduct that action). The party bringing or defending the action will reimburse the other party its reasonable costs arising from providing such assistance.

12.7 GTG not to challenge University Patents

GTG and its Affiliates and any sub-licensees must not directly or indirectly:

(a) at any time challenge, contest, deny or assist any other person to challenge, contest or deny the validity of University Patents, the right or title of the University thereto or the grant of a patent pursuant to any patent application within the University Patents; or

(b) raise or cause to be raised any objection to the validity of any University Patents ; or

(c) oppose any application for an extension of the term of any University Patents; or

(d) itself apply for any University Patents,

and if it does so, the University may immediately terminate this Agreement by written notice to GTG.

13. PUBLICATION

13.1 GTG acknowledges that the University may wish to publish or otherwise publicly disclose certain results generated using, or incorporating certain of its Background IP, Work Program IP or the Developed IP **(Publication).** However, the University must obtain GTG's prior approval to any Publications in accordance with this clause 13.

13.2 The University must provide to GTG, in confidence, an advance copy of any Publication at least one (1) month prior to any public disclosure or submission for publication. GTG must reply in writing within one (1) month of receipt of a proposed Publication stating whether it approves or does not approve the Publication. GTG must not withhold such approval unless it reasonably believes that the Publication:

(a) could harm, prejudice or in any other way injure the rights which GTG has under this Agreement, or its ability to Commercialise the Products; or

(b) discloses GTG's Confidential Information.

13.3 Nothing in this clause 13 or elsewhere in this Agreement will operate to diminish or derogate from the University's publication responsibilities under the *Australian Code for the Responsible Conduct of Research* **(Code).** In the event of any inconsistency between the University's publication responsibilities under the Code and under this Agreement, the responsibilities under the Code will prevail to the extent of that inconsistency only.

14. WARRANTIES

14.1 Mutual warranties

Each party warrants and represents to the other that:

(a) it has taken all necessary action to authorise the execution, delivery and performance of this Agreement;

(b) it has power to enter into this Agreement and perform it without the consent of any other person; and

(c) the execution, delivery and performance of this Agreement complies with all laws, its constituent documents and any other document binding on that party.

14.2 Acknowledgements

GTG acknowledges that:

(a) the Final Work Program Report and the University Patents are provided on an "as is" basis;

(b) the University has not, nor has any person on behalf of the University given or agreed to any term, warranty, undertaking or understanding that is not expressly set out in this Agreement; and

(b) no representation or promise of any kind, not expressly included in this Agreement, was made by the University before this Agreement was entered into.

14.3 GTG Warranties

GTG warrants that:

(a) it will not use the name of the University in any manner unless expressly approved by the University in writing;

(b) it will not use, nor allow, the use by third parties of the University name and logo on any Products, unless the University has expressly agreed in writing;

(c) it will not institute any proceedings against the University or join in any legal proceedings against the University brought by another person with respect to the University Patents;

(d) it will do all things reasonably within its capacity to ensure that the University is not exposed to any liabilities that might arise, directly or indirectly from the Exploitation of any Products; and

(e) it will use its reasonable endeavours to Exploit the University Patents.

14.4 Exclusion of implied terms

To the maximum extent permitted by law:

(a) all terms and warranties expressed or implied by any legislation, the common law, equity, trade, custom or usage or otherwise in relation to the grant by the University of rights in respect of the University Patents or otherwise under this Agreement are excluded;

(b) without limitation, the University disclaims any implied warranty, condition or representation that any of the University Patents:

(i) corresponds with a particular description;

(ii) is of merchantable quality;

(iii) is fit for a particular purpose; or

(iv) is durable for a reasonable period of time;

(c) the University is not liable in any way for any loss or loss of profit or damage arising out of the grant of rights in respect of the University Patents, or otherwise in connection with this Agreement;

(d) the aggregate liability of the University for any and all loss and damages in connection with this agreement which is not excluded by paragraph (b) is limited to:

(i) in circumstances where the University's liability is covered by its professional indemnity insurance policy, the extent of the payout under that policy; and

(ii) in any other circumstances, the amounts already paid by GTG under clause 6 at the time when the loss or damage is sustained.

(e) if any Law implies in this Agreement any term or warranty and also prohibits provisions in a contract excluding or modifying the application of or exercise of, or

liability under, that term or warranty, that term or warranty is deemed to be included in this Agreement;

(f) if any legislation implies in this Agreement any term or warranty and also prohibits provisions in a contract excluding the application of or exercise of that term or warranty then, to the maximum extent permitted by law, the liability of the University for a breach of such a term or warranty will be limited, at the option of the University, to any one or more of the following:

(i) if the breach relates to goods:

(A) the replacement of the goods or the supply of equivalent goods;

(B) the repair of such goods;

(C) the payment of the cost of replacing the goods or of acquiring equivalent goods; or

(D) the payment of the cost of having the goods repaired; and

(ii) if the breach relates to services:

(A) the supplying of the services again; or

(B) the payment of the cost of having the services supplied again.

14.5 Exclusion of University Warranties

Nothing in this Agreement constitutes a warranty or representation by the University:

(a) that anything made, used, sold pursuant to this Agreement is free from infringement of any Intellectual Property rights;

(b) regarding the safety of the University Patents;

(c) regarding the profits or revenues that may result from the Exploitation;

(d) regarding the prospects or success for Exploitation;

(e) whether any patent application may be granted, or granted with the claims sought, or any reduced claims; or

(f) that any patent granted may be declared invalid or cease to be registered; or

(g) that it will bring, prosecute or defend any actions or suits against third parties for infringement of any intellectual property rights or contractual rights.

15. INDEMNITY AND INSURANCE

15.1 Exploitation at GTG risk

GTG Exploits the Background IP and Work Program IP entirely at its own risk.

15.2 GTG Indemnity

GTG irrevocably indemnifies the University and its officers and employees against all Claims (whether during or after the term of this Agreement) incurred by the University arising directly or indirectly from:

(a) the development, manufacture, sale, marketing or supply of any Products by or on behalf of GTG or any of its sub-licensees;

(b) any breach by a sub-licensee of any sub-licence granted by GTG to a sub-licensee;

(c) the use by any person of any Products; or

(d) the exercise by GTG of any of its rights under this Agreement,

provided however that such indemnity shall not apply to Claims arising directly from any negligent act of the University under this Agreement.

15.3 Continuing and separate obligations

(a) Each indemnity in this Agreement is a continuing obligation, separate and independent from the other obligations of GTG, and survives the termination or expiry of this Agreement.

(b) It is not necessary for the University to incur any expense or make any payment before enforcing any right of indemnity conferred by this Agreement.

15.4 Insurances

During the Term and for seven (7) years thereafter, GTG will maintain insurance with a reputable insurer in respect of the manufacture, sale, marketing or use of Products:

(a) product liability insurance at no less than the value generally accepted by industry standards; and

(b) third party liability insurance at no less than the value generally accepted by industry standards;

and will provide copies of the certificates of currency of insurance to the University upon request.

16. CONFIDENTIALITY

16.1 Procedure when Receiving Confidential Information

When receiving Confidential Information, the Receiving Party will:

(a) keep all Confidential Information of the Disclosing Party confidential except to the extent required otherwise by law;

(b) limit access to the Confidential Information to those of its personnel that require it;

(c) not use any Confidential Information in any way other than as contemplated by this Agreement without the prior written permission of the Disclosing Party; and

(d) ensure that all Personnel to whom Confidential Information is disclosed are legally bound under the terms and conditions of their employment agreements or otherwise to keep the Confidential Information confidential and not to use the Confidential Information except for the purposes of this Agreement.

16.2 Exclusions to Confidential Information

Confidential Information excludes, or as the case requires, ceases to include information, which is, or becomes:

(a) available to the public at or after the date of its disclosure to the Receiving Party otherwise than through the default of the Receiving Party;

(b) properly in the possession of the Receiving Party in written form otherwise than by prior confidential disclosure from the Disclosing Party;

(c) properly available to the Receiving Party from a third party having no obligation of confidentiality to the Disclosing Party;

(d) demonstrated by the Receiving Party to be independently developed by an employee or agent of the Receiving Party having no knowledge of such information which is the subject of the disclosure.

16.3 Return of Confidential Information

At the termination or expiration of this Agreement and upon the written request of the Disclosing Party, the Receiving Party will return to the Disclosing Party any documents originating from the Disclosing Party which embody Confidential Information provided

however that the Receiving Party may keep a copy of the Confidential Information for its records.

16.4 Disclosure of Confidential Information

Either party may disclose on a confidential basis the Confidential Information of the other party:

(a) to a representative that requires the information for the purposes of this Agreement;

(b) to its legal advisers in order to advise that party in relation to its rights under this Agreement; and

(c) with the written consent of the other party.

17. TERMINATION

17.1 Reciprocal right of termination for Default

Without limiting any other rights it may have, a party may terminate this Agreement:

(a) in respect of the Licence and all aspects of the Agreement that are not directly relevant to the Services, at any time by giving Notice of termination to the other party, if that other party:

(i) fails to pay any sum due and payable under this Agreement in connection with the Licence and such default continues for a period of 30 days after receipt of a Notice requiring payment;

(ii) is in breach of any of its other obligations under this Agreement in connection with the Licence and that breach is not reasonably capable of remedy or, if that breach is capable of remedy, does not rectify that breach within 60 days after receipt of a Notice to remedy that breach; and/ or

(b) in respect of the Services, at any time by giving Notice of termination to the other party, if that other party:

(i) fails to pay any sum due and payable under this Agreement in connection with the Services and such default continues for a period of 30 days after receipt of a Notice requiring payment;

(ii) is in breach of any of its other obligations under this Agreement in connection with the Services and that breach is not reasonably capable of remedy or, if that breach is capable of remedy, does not rectify that breach within 60 days after receipt of a notice to remedy that breach; and

(c) in its entirety, if that other party is affected by an Insolvency Event.

17.2 Additional Termination rights

(a) If GTG fails without reasonable cause to comply with the Development Plan then, in addition to any other rights, the University may render the Licence granted to GTG under clause 4.1 non-exclusive subject to a notice period of no less than 45 days.

(i) The University may terminate this Agreement by giving Notice of termination to GTG, if GTG fails to use reasonable efforts to Exploit the Products under clause 8.1; or

(ii) prior to their commercial launch, discontinues development of the Products for any period of twelve (12) or more months.

17.3 Accrued Rights

Any termination of this Agreement is without prejudice to any party's rights against the other party which have accrued prior to the time at which such termination occurred.

17.4 Effect of Termination

On termination of this Agreement:

(a) the licence granted under clause 4.1 and any Sub-Licences end;

(b) GTG will return to the University all material forms of the University Patents and all University Confidential Information in its possession or control and ensure the return of the same in any Sub-Licensee's possession or control; and

(c) GTG will immediately pay to the University any amounts due under this Agreement but unpaid.

(d) The University will return all material forms of GTG IP to GTG and all GTG Confidential Information in its possession or control.

18. NOTICES

18.1 Representatives

Each party will appoint a Representative to be responsible for communications under this Agreement on behalf of that party and will provide written notice to the other party of that appointment. Each party:

(a) may replace its Representative by written notice to the other party;

(b) acknowledges a Representative is authorised to act as that party's agent in relation to the exercise by them of their rights, discretions and obligations under this Agreement.

Each Representative has the full power and authority to act for and on behalf of and to bind the Party that it represents.

18.2 Notices

Any Notice under this Agreement will be:

(a) to each party's Representative;

(b) in writing and signed by a person authorised by the sender; and

(c) if hand delivered or sent by prepaid post, email or facsimile to the recipient's address specified in the details as set out at the start of this Agreement and marked to the attention of the contact person specified in the details, as varied by any Notice given by the recipient to the sender.

18.3 When Notice takes effect

A Notice in accordance with Clause 16.2 takes effect:

(a) if hand delivered, on delivery;

(b) if sent by facsimile or email, when the sender's system generates a message confirming transmission of the entire Notice;

(c) if sent by prepaid post, on the second Business Day after the date of posting or on the seventh Business Day after the date of posting if posted to or from a place outside Australia;

but if the delivery, receipt or transmission is not on a Business Day or is after 5.00pm on a Business Day, the Notice is taken to be received at 9.00am on the next Business Day.

19. GOODS AND SERVICES TAX

(a) Unless otherwise specified, any reference to an amount payable or consideration to be provided for a supply to be made by a party under or in relation to this Agreement is a reference to that amount or consideration excluding any value added tax, goods and services tax or any similar tax, levy or duty in any relevant jurisdiction payable in respect of that supply. A party may increase such amount payable or consideration to be provided for a supply to be made by a party, on account of that tax, levy or duty at the applicable prevailing rate. The other party must also pay that increased amount.

(b) To the extent that GTG has to pay any Tax on any amount payable to the University under this Agreement, GTG will pay the University such amount that, after deduction of that Tax, the University receives the amount GTG is required to pay under the relevant clause of this Agreement.

20. DISPUTE RESOLUTION

20.1 Negotiation in good faith

If any dispute arises in connection with this Agreement **(Dispute)** neither party may commence any court or other proceedings in relation to the Dispute unless it has first complied with this clause 20.

20.2 Written Notice

A party alleging a Dispute has arisen will provide written notice to the other party giving full details of the Dispute **(Notice).**

20.3 Negotiation of Dispute

The parties will in good faith use their reasonable endeavours to resolve the Dispute for no more than 30 days from the date of service of the Notice of the Dispute.

20.4 Referral to Nominated Representatives

If the Dispute cannot be resolved under clause 18.3, then the parties will refer the dispute to:

(a) in the case of the University, the Vice-Principal (Exploitation); and

(b) in the case of GTG, its Chief Executive Officer,

or their nominees (collectively referred to as the **Nominated Representatives.)**The Nominated Representatives will in good faith use their reasonable endeavours to resolve the dispute for no more than 30 days from the date the Dispute was referred to them.

20.5 Arbitration

If the Parties are unable to resolve the Dispute in accordance with clause 18.3 or clause 18.4 then the Dispute may be submitted by either party for determination by arbitration. There will be no right of appeal from the decision of the arbitrators and their decision will be enforceable by the decree or any court having jurisdiction over the parties.

20.6 Costs

Each party will pay their own costs arising out of the Dispute.

20.7 Interlocutory Relief

Nothing in this clause 18 will prevent a party from seeking interlocutory relief from a court of appropriate jurisdiction.

20.8 Performance of Obligations

The parties will continue to perform all their obligations under this Agreement while the Dispute is ongoing.

21. PUBLIC ANNOUNCEMENT

Any public announcement in connection with this Agreement must be agreed in writing by the parties before it is made, except if required by law or a regulatory body in which case the party required to make an announcement must, to the extent practicable, first consult with and take into account the reasonable requirements of the other party.

22. NO THIRD PARTY RIGHTS

Except to the extent expressly set out in this Agreement, this Agreement is not intended to, nor shall it create, any rights, entitlements, claims or benefits enforceable by any persons not a party to it.

23. ASSIGNMENT

A party may not assign its rights or obligations arising under this Agreement without the prior written consent of the other party.

24. RELATIONSHIP OF PARTIES

The parties are independent contracting parties, and nothing in this Agreement shall make any party the agent, partner or legal representative of the other party, nor does it grant either party any authority to create any obligation on behalf of or in the name of the other party.

25. ENTIRE AGREEMENT

This Agreement (as evidenced in writing in this document) constitutes the entire agreement of the parties with respect to its subject matter and supersedes all prior oral or written understandings, representations and agreements.

26. FURTHER ASSURANCES

Each party agrees to do all things and execute all deeds, instruments, transfers or other documents as may be necessary or desirable to give full effect to the provisions of this Agreement and the transactions contemplated by it.

27. SEVERABILITY

If any provision or part of any provision of this Agreement is invalid or unenforceable, such provision or part of any provision shall be deemed deleted but only to the extent necessary and the remaining part of that provision (if any) and other provisions of this Agreement shall remain in full force and effect.

28. NO IMPLIED WAIVER

A party does not waive a breach of any provision of this Agreement if it fails to exercise or delays in exercising its rights. A waiver by either party of a breach of any provision of this Agreement does not constitute a waiver of any succeeding breach of the same or any other provision. A waiver of a breach of this Agreement must be in writing and signed by the party giving the waiver.

29. AMENDMENT

Any modification , alteration, change or variation of any term or condition of this Agreement will be in writing and executed by both parties.

30. UNFORESEEN EVENT

The University is not liable for any failure to perform, or delay in performing an obligation under this Agreement where such failure or delay is due to any Unforeseen Event.

31. COUNTERPARTS

This Agreement may be executed in counterparts. All executed counterparts constitute one document.

32. GOVERNING LAW AND JURISDICTION

This Agreement is governed by the laws from time to time in force in the State of Victoria, Australia. Each party irrevocably and unconditionally submits to the non-exclusive jurisdiction of the courts of the State of Victoria, Australia and the courts entitled to hear appeals from those courts.

33. SURVIVAL

Clauses 1, 6.1 - 6.6, 7, 10, 15, 16, 17.3 - 17.4, 19, 23- 28, 30 • 32 and this clause 33 survive termination or expiry of this Agreement.

EXECUTED AS AN AGREEMENT

EXECUTED for and on behalf of **THE UNIVERSITY OF MELBOURNE** in the presence of:	/s/ Allan Stewart Tait
/s/ Leena Lobo Signature of Witness	Office held
Leena Lobo Name of Witness (block letters)	ALLAN STEWART TAIT Name of authorised person (block letters)
EXECUTION for and on behalf of **GTG** in the presence of	
/s/ Karen Phillips Signature of Witness	/s/ Eutillio Buccilli Signature of authorised person Chief Executive Officer Office held
Karen Phillips Name of Witness (block letters)	Eutillio Buccilli Name of authorised person (block letters)

SCHEDULE 1

Item 1	**Service Fees**	GTG will pay to the University: **First Service Fee** AU$50,000 payable within seven (7) days of the Start Date; and **Second Service Fee** AU$50,000 payable on receipt by GTG of the Final Work Program Report from the University.
Item 2	**Licence Fees**	GTG will pay to the University: **First Licence Fee** AU$50,000 payable upon the filing by GTG or its nominee of the first regulatory approval application for the Product in any jurisdiction; and **Second Licence Fee** AU$200,000 payable as follows: (a) AU$100,000 on the later of the first anniversary of the Start Date or the provision of the mutually agreed Final signed off Work Program Report to GTG (except where the provision of the Final Work Program Report is delayed due to breach of this Agreement by GTG, in which case the payment must be made on the first anniversary of the Start Date); and (b) AU$100,000 on the first sale of a Product in any jurisdiction.
Item3	**Royalties**	GTG will from the start of the first Royalty Period pay the University: (a) If the University Patents: (i) have not been invalidated and have not expired in a jurisdiction in the Territory: 4.0% of the total accumulated Net Revenue in respect of that jurisdiction that are is not directly or indirectly attributable any sub-licence granted by GTG under this Agreement; or (ii) are invalidated, or have expired in a jurisdiction in the Territory: 2.0% of the total accumulated Net Revenue in respect of that jurisdiction that are not directly or indirectly attributable any sub-licence granted by GTG under this Agreement; and (b) 25% of all of the revenue (whether cash, in-kind, or any other form of consideration) directly or indirectly received by GTG from any sub-licence it grants under this Agreement during the Term.
Item4	**Work Program**	The Work Program comprises: • design of a case-control study to evaluate the performance of a multi-component genetic test to predict the risk of developing colon cancer; • extraction of data from existing Centre for Epidemiology data banks; • statistical analysis of the preliminary data using Centre for Epidemiology computing infrastructure;

- generation of an interim analysis detailing the performance of the genetic markers for predicting colon cancer risk;

- test the ability to combine this genetic information with other risk prediction algorithms (based on clinical history and lifestyle factors) such as MMRPRO and CRIPT; and

- generation of a final report to GTG.

SCHEDULE 2

Development Plan

The commercial Development Plan will seek to achieve US sales of a colorectal cancer risk test within 24 months following completion of the work program identified in Schedule 1. The Development Plan will evolve and be updated annually on the basis of generating new relevant information. The plan at the time of this agreement is:

Estimated time of completion	Activity
April 2017	• In-house validation of the colorectal SNP assay
April 2017	• In-house validation of risk assessment algorithm
June 2017	• Completion of collaborative R&D project to ensure scientific validation of the test prior to commercial launch
June 2017	• Development of a test work-flow and documentation of a Laboratorv Developed Test under the CMS/CLIA regulations
June 2017	• Development of a reimbursement strategy for the US based upon existing CPT codes
August 2017	• Development of a market-access strategy (The product is initially envisaged as targeting patients aged 50 and over and appropriate for regular CRC screening
November 2017	• Development of marketing collateral (including Test Request Form, Test Report Form, and product specific collateral)
December 2017	• US sales team training and product messaging
March 2018	• Focused product launch in specific “pilot” risk assessment clinics
Estimated future activities (e.g.)	• Review of regulatory strategy in other regions (e.g. Europe)
	• Conduct relevant clinical studies

Exhibit 10.3

MEMORIAL SLOAN KETTERING CANCER CENTER,
UNIVERSITY OF CAMBRIDGE, AND
PHENOGEN SCIENCES
COLLABORATIVE RESEARCH AGREEMENT

THIS COLLABORATIVE RESEARCH AGREEMENT (hereinafter "Agreement''), effective as of the last date of execution by the parties hereto ("Effective Date*"),* is by and between MEMORIAL SLOAN KETTERING CANCER CENTER (hereinafter "MSK"), a not-for-profit .corporation of the State of New York having offices at 1275 York Avenue, New York, NY 10065, THE CHANCELLOR. MASTERS AND SCHOLARS OF THE UNIVERSITY OF CAMBRIDGE, a not-for-profit entity of the United Kingdom having offices at The Old Schools, Trinity Lane, Cambridge CB2 1TN, UK (hereinafter "Cambridge"), and PHENOGEN SCIENCES, Inc., (Phenogen· or "Company") a for-profit entity of the State of North Carolina, having offices at Suite 320, 9115 Harris Corners Parkway, Charlotte, NC 28269 USA and subsidiary of GENETIC TECHNOLOGIES LIMITED, a for-profit entity of Australia, having offices at 60-66 Hanover Street, Fitzroy, Victoria 3065, Australia. Each of MSK, Cambridge and Phenogen may be referred to as a "Party" and collectively as the "Parties.·

WHEREAS, MSK is a premier cancer center committed to exceptional patient care, leading edge research and superb educational programs;

WHEREAS, Cambridge is a premier academic Institution contributing to society through the pursuit of education, learning, and research at the highest international levels of excellence;

WHEREAS, Phenogen is a biotechnology company committed to women's health and bringing to market the most recent advancements in breast cancer risk assessment;

WHEREAS, Cambridge has developed an algorithm to generate "Polygenlc Risk Scores" for BRCA1 and BRCA2 mutation carriers ("AAlgorithm"): and

WHEREAS, MSK, Cambridge and Phenogen desire to undertake a collaborative effort using the Algorithm to develop software applications which correlate patients' variant burden and BRCA1/BRCA2 mutations with his/her probability of developing breast cancer (such software to be referred to as "Applications").

NOW THEREFORE, In consideration of the foregoing recitals, the mutual agreements and promises set forth below, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. COLLABORATIVE WORK PLAN

1.1 MSK, Cambridge and Phenogen agree to collaborate In a program of Applications development entitled KBCRF Risk Project (hereinafter, the "Plan") as described In Exhibit A, which is attached and made part of this Agreement.

1.2 Each Party will use· its own funds to carry out its participation in the Plan, subject to Clause 1.4 below.

1.3 (I) Cambridge hereby grants to MSK and Phenogen those license rights to: (a) the Algorithm set forth In Section 3 hereinafter; and (b) related confidential information, described more fully below. This license and information are being provided for the sole purpose of allowing MSK and Phenogen to assist In creating the Applications referenced In the Plan.

(II) Phenogen wlll provide the other Parties with periodic written reports detailing Its status in performing Its obligations under the Plan. Phenogen shall be available by phone and e-mail to discuss its progress no less frequently than quarterly. Phenogen shall provide MSK and Cambridge access to any Appllcatlons it creates for research use only. Phenogen shall also support design reviews regarding the development of the Applications under the Plan, as requested by the other Parties. Design reviews may be held via teleconference or at a mutually agreed upon location.

1.4 A. As consideration for performance by Phenogen. under the terms of this Study Agreement, MSK shall pay Phenogen according to the following schedule:

Cost to genotype BC-SNP per Subject: USO 100

This cost per Subject Includes the following:

1. Design and analytic validation of the BC-SNP used In the Study
2. Buccal-swab kit
3. Shipping to lab
4. Genotyping and Reporting of results

2. Proje ct Managers.

2.1 The primary contact (hereinafter "Project Manager(s)") assigned by MSK for directing the perfonnance of the Plan Is Dr. Mark Robson. The Project Manager assigned by Cambridge is Professor Antonis Antoniou. The Project **Manager** assigned by Phenogen is Dr. Erika Tuff. If for any reason the Project Manager(s) of one of the Parties becomes unavailable, the affected Party shall promptly notify the other Parties In writing. If a mutually acceptable successor is not identified, this Agreement may be terminated immediately by any Party.

2.2 Phenogen's Project Manager will meet on a regular basis with MSK's representatives, and Cambridge's repr sentatlves at their reasonable request, through teleconference, web interface, and face-to-face meetings to ensure the Applications comply with functional and quality requirements.

3. DATASET LICENSE GRANT AND TERMS

3.1 Cambridge hereby grants to MSK and Phenogen a non-exclusive license to use the Algorithm for each Party's respective performance under the Plan, and not for any other purpose. Only those of the Parties' resources which have been directly engaged by the Project Managers may access or use the Algorithm. Except as stated In the previous sentence, neither MSK nor Phenogen may transfer, or provide access to, the Algorithm to any third party without Cambridge's prior written consent. Each of MSK and Phenogen shall ensure that their resources use the Algorithm In accordance with all applicable laws and appropriate standards of skill and care.

3.2 Cambridge retains the rights and ownership it has in the Algorithm. These rights include the rights to reproduce, modify, improve, use, transfer and sell the Algorithm for any purpose.

3.3 The license granted hereunder shall not be construed to confer any rights to MSK or Phenogen by Implication, estoppel or otherwise as to any technology or material not Included In the Algorithm.

3.4 Except for the development of the Applications, MSK and Phenogen shall not modify, abridge, condense, adapt, recast, or transform or create a derivative work of the Algorithm. in any manner or form,

without the prior written agreement of Cambridge except as expressly set forth in the Plan.

3.5 MSK and Phenogen acknowledge that the Algorithm is or may be the subject of a patient application or other intellectual property rights. Except as provided in this Agreement, no express or implied licenses or other rights are provided to MSK and Phenogen under any proprietary rights of Cambridge, Including without limitation patents, patent applications or trade secrets. Except as provided herein, no express or Implied licenses or other rights are provided to use the Algorithm or any related patents of Cambridge. If Phenogen desire to use, license or otherwise provide the Algorithm for commercial purposes at the end of the Plan, Cambridge will offer Phenogen an option to enter into a non-exclusive royalty-bearing license agreement to commercially exploit the Algorithm. The applicable Party/(les) shall first negotiate in good faith with Cambridge to establish the terms of a commercial license. Cambridge shall have no obligation to grant such a license, and may grant exclusive or non-exclusive commercial licenses to others, or sell or assign all or part of the rights in the Algorithm to any third party.

4. RIGHTS IN WORK PRODUCT. All Applications, original research results, data, records, discoveries, inventions. tangible property, and Intangible property produced under this Agreement (collectively "Work Product"), regardless of whether such Work Product Is patentable or otherwise protectable under United States law, shall be jointly owned by MSK and Phenogen. Each of MSK and Phenogen is free to use, exercise, or practice the Work Product without consent of, or accounting to, the other Party, provided that, to the extern such Work Product requires the use of Cambridge's Algorithm, permission is obtained from Cambridge prior to any commercial exploitation of the Work Product. Subject to the negotiation of a commercial license with Cambridge under Section 3.5 hereto, the Parties agree to discuss, in good faith, collaboratlve management of all Work Product. MSK and Phenogen hereby grant to Cambridge a non-exclusive, royalty-free license to use the Work Product for research purposes. To the extent any Work Product is jointly invented or created by Cambridge, Cambridge shall also constitute a joint owner of such Work Product

5. REPORTS. Phenogen shall provide those reports specified in Section 1.3(ii) hereinabove. Additionally, within thirty (30) days following termination of this Agreement, Phenogen will furnish to MSK and Cambridge a final technical report summarizing the work performed and the results thereof.

6. PUBLICATION.

6.1 Publication. The Parties agree that they may collaborate on a joint publication and/or presentation with respect to the Plan results or conclusions. The Parties agree to cooperate with each other should they decide to so jointly publish and/or present. Notwithstanding the foregoing, if one Party proposes to separately publish any results or conclusions from the Plan, it must allow the other Parties to review any proposed publication thirty (30) days prior to submitting it for publicatlon. If within said period, the reviewing Party notifies the other Party hereto in writing that lt wishes publication of identified portions to be delayed In order to protect proprietary lnformation or intellectual property that may be disclosed by the publication or to prepare and file a patent application, the Party so notified will use reasonable efforts to cause publication to be delayed for up to an additional sixty (60) days. Such delay will not however be imposed on the filing of any student thesis or dissertation. In addition, a Party shall not publish Confidential Information received from the other party (not to include results, information, data or materials generated In the course of the Research Project) without such other party's written consent

6.2 Authorship. Authorship of publications of the results of the Plan wlll be determined in accordance with appropriate scientific and academic standards and customs. Proper acknowledgement will be made for the contributions of each Party to the collaboration.

7. CONFIDENTIALITY.

7.1 During the Term, one Party may provide proprietary and confidentlal Information to the other Party that It considers necessary to conduct the Plan. Accordingly, Confidential Information is any and all data and information that is disclosed by the disclosing Party to the receiving Party during the Term, regardless of whether the information Is disclosed in writing, orally, graphically, electronically, or In any other manner, and which relates to the Plan, is expressly marked or designated In writing as confidential and proprietary by the disclosing Party, or is of a character that one would reasonably consider to be confidential In the field of research. Except to the extent required by law or as necessary for reporting purposes, the Parties will not disclose any specific terms of this Agreement to any third Party or refer to any specific terms of this Agreement, without prior approval from the other Party, although 1he Parties will not unreasonably withhold such approval.

7.2 The Parties agree that any Confidential Information disclosed, developed or otherwise derived in accordance with this Agreement will be maintained in secrecy and confidentiality and each Party will use all reasonable diligence to prevent disclosure except to its own personnel on a "need to know" basis and to Its professional advisors who are under a similar obligation of confldentlaUty and non-use. The Parties agree to protect Confidential Information disclosed to them with the same degree of care, but no less than a reasonable degree of care, as they use to protect their own Confidential Information, and agree not to disclose Confidential Information to any third Party without the prior written permission of the disclosing Party. The Parties will obtain acceptance of the terms of this Agreement by all persons under their direct control and supervision who have access to the Confidential Information disclosed to them under this Agreement.

7.3 During the Term, and for five (5) years thereafter, the Parties shall not disclose to third parties or the public any Confidential Information received from the other Party under this Agreement without the consent of the disclosing Party. This obligation shall not apply to Confidential Information which:

I) is or becomes a matter of public knowledge;
Ii) Is, as shown by adequate proof, already in the possession of the receiving party prior to receiving it from the disclosing party;
iii) is developed Independently of lnformation received from the disclosing party, as evidenced by written documentation; or
iv) Is disclosed to the receiving Party by a third party who is not under an obligation of confidentiality relative to the non-receiving party.

7.4 If a receiving Party or Its representatives are requested or required by applicable laws, judicial orders or governmental regulations (i.e., without limitation, by oral questions, interrogatories or other requests for information or documents in legal proceedings, subpoena, civil investigative demand or other similar proceeding) to disclose any Confidential Information or any of the facts, disclosure of which is prohibited under this Agreement, and more specifically under this Article 7, then the receiving Party will advise the disclosing Party with prompt written notice of any such request or requirement so that the disclosing Party may seek a protective order or other appropriate remedy and/or waive the receiving Party's need for compliance with the provisions of this Agreement regarding confidentiality as it relates to the Confidential Information required to be disclosed.

a. Intentionally omitted.

9. WARRANTIES AND _INDEMNIFICATION,

9.1 NONE OF THE PARTIES MAKE ANY REPRESENTATIONS NOR EXTEND ANY WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED. THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR THAT THE

USE OF THE ALGORITHM, RESULTS, APPLICATIONS, OR ANY RIGHTS OR ACCESS THERETO WILL NOT INFRINGE ANY PATENT, COPYRIGHT, TRADEMARK, OR OTHER PROPRIETARY RIGHTS.

9.2. Phenogen shall at all times, defend, Indemnify and hold MSK and Cambridge, and their respective affiliates, directors, officers, agents and employees (collectively "Indemnitees"), harmless against all claims, fees and expenses resulting from Phenogen's receipt, use, handling, storage or disposal of the Algorithm, Applications, and Work Product. No settlement, consent judgment or other voluntary final disposition of the suit may be entered Into without the prior written consent of the applicable Indemnified party, which consent shall not unreasonably be withheld. This Article shall survive any termination of this Agreement.

9.3 Subject to Article 9.2, MSK shall be liable for its receipt, use, handling, storage or disposal of the Work Product

9.4 Phenogen represents and warrants that it carries Insurance in sufficient amounts to protect MSK and Cambridge with regard to events covered by this Section 9.

9.5 MSK represents and warrants that It has, but only if and to the extent necessary, obtained appropriate ethical and informed consents to. use and generate Work Product and that any results and Work Product being shared with the other Parties will be anonymized.

10. TERM AND TERMINATION.

10.1 This Agreement shall be in effect for three (_3_) years from the Effective Date, unless extended by written mutual agreement of the parties. This Agreement may be terminated by any party giving to the others a minimum of thirty (30) days prior written notice.

10.2 Upon termination or expiration of this Agreement, or upon the earlier request of Cambridge, MSK and Phenogen shall promptly destroy all copies of the Algorithm and Cambridge's Confidential Information. All rights granted hereunder by Cambridge shall revert to It.

10.3 Upon termination or expiration of this Agreement, the Parties shall furnish to each other the technical report(s) referenced ln·Artlcle 5 herein.

10.4 Articles 3-9 inclusive, Articles 11-12 incluslve, Article 16, and Articles 21-22 inclusive shall survive expiration or termination of this Agreement.

11. RELATIONSHIP OF PARTIES. The relationship between the Parties under this Agreement shall be that of independent contractors and not as an agent, joint venturer, or partner. Nothing in this Agreement gives any Party the right to act on behalf of the other or incur any obligation or liablllty on behalf of any other Party without its prior written consent.

12. USE OF NAME. No Party shell use the name of any other Party, or any variant thereof, or that of its employees in advertising or for any other commercial purpose without such other Party's prior written approval. No Party shall state or Imply in any publication, advertisement, or other medium that any product or service bearing any of the other Party's names or trademarks, which it manufactures, sells, or distributes, has been tested, approved, or endorsed by such other Party.

13. WAIVER, AMENDMENTS. No waiver, amendment or modification of this Agreement will be effective unless in writing and signed by all Parties.

14. ASSIGNMENTS. This Agreement may not be assigned by any Party without the prior written consent of the other Parties; however, this Agreement will be binding on any successors or permitted assigns of any Party. Any attempted assignment or subcontracting In derogation of the foregoing shall be null and void. PHENOGEN shall not subcontract any part of Its obligations under this Agreement.

15. INSURANCE. Each Party will maintain Insurance In type and amount sufficient to satisfy Its obligations under this Agreement

16. GOVERNING LAW. The Parties expressly agree that this Agreement and the enforcement of the rights and obligations hereunder shall be governed by and construed In accordance with the laws of the State of New York, without regard to its provisions concerning the applicability of the laws of other jurisdictions. Any and all claims arising out of, relating to or In connection with this Agreement, or the relationship between the Parties hereto, shall be subject to the exclusive jurisdiction of and venue in the federal and state courts within New York and each Party hereby consents to the exclusive jurisdiction and venue of these courts, without regard to any conflicts of law principles. Each Party agrees that all claims and matters may be heard and determined In *any* such court and each Party waives any right to object to such action on venue, forum non conveniens, or similar grounds.

17. DISPUTE RESOLUTION. Any Party may give a dispute notice to the other Parties to escalate any dispute under this Agreement within twenty-eight (28) days for Joint resolution by the Head of the Research Operations Office for Cambridge, the Vice President of Technology Development for MSK, and the Chief Executive Officer for Phenogen.

17.1 Negotiation In good faith
If any dispute arises In connection with this Agreement **(Dispute)** neither party may commence any court or other proceedings In relation to the Dispute unless it has first complied with this clause 17.

17.2 Written Notice
A party alleging a Dispute has arisen will provide written notice to the other party giving full details of the Dispute **(Notice).**

17.3 Negotiation of Dispute
The parties will In good faith use their best endeavours to resolve the Dispute for no more than 30 days from the date of service of the Notice of the Dispute.

17.4 Referral to Nominated Representatives
If the Dispute cannot be resolved under clause 17.3, then the parties will refer the dispute to;

17.4.1 in the case of MSK, the Vice President of Technology Development

17.4.2 In the case of Phenogen, Its Chief Executive Officer,

17.4.3 in the case of Cambridge, the Head of the Research Operations Office
or their nominees (collectively referred to as the **Nominated Representatives).** The Nominated Representatives wlll In good faith use their best endeavours to resolve the dispute for no more than 30 days from the date the Dispute was referred to them.

17.6 **Costs**
Each party will pay their own costs arising out of the Dispute.

17.6 Interlocutory Relief
Nothing In this clause 17 will prevent a party from seeking interlocutory relief from a court of appropriate jurisdiction.

17.7 Performance of Obligations
The parties will continue to perform all their obligations under this Agreement while the Dispute is ongoing.

18. NOTICES. Any notice or communication required or permitted to be given to a Party under this Agreement will be made In writing and sent by registered or certified mail or by a nationally recognized overnight courier service. Notices under the preceding sentence will be deemed given on the date of

receipt.

lfto MSK:

Memorial Sloan Kettering Cancer Center
Attention: Gregory Raskin, M.D.
Vice President, Technology Development

1275 York Avenue, Box 524
New York, N.Y. 10065

With a *copy* to:
Office of Technology Development
Attention: Shilpl A. Banerjee, Esq.
Chief Intellectual Property Counsel & Associate General Counsel
If by mail: 1275 York Avenue, Box 524
New York, N.Y.10065
If by courier: 600 Third Avenue, 16th Fl.
New York, N.Y.10016

If to Phenogen:
Phenogen Sciences
Attention: Erika Spaeth Tuff, PhD
Director of Clinical Affairs and Medical Education
1300 Baxter Street, Suite 157
Charlotte, NC 28204

With a copy to:
Genetic Technologies I Phenogen Sciences
Attention: Richard Allman,PhD
Scientific Director
60-66 Hanover street, Fitzroy, Vic 3065 Australia.
If to Cambridge:
Assistant Director, School of Clinical Medicine
Research Operations Office
University of Cambridge
Greenwich House
Madlngley Road
Cembridge CB3 OTX
United Kingdom

19. Headings. The captions or headings in the Agreement do not form part of the Agreement, but are included solely for convenience.

20. Entire Agreement. The Agreement embodies the entire agreement of the parties. It supersedes all prior agreements, whether written or verbal, between the parties with respect to the subject matter.

2.1. Severability. If any term or condition of the Agreement Is contrary to applicable law. such term or condition will not apply and will not Invalidate any other part of the Agreement.

22. No Third Party Beneficiaries. The Agreement does not create any rights, or rights of enforcement, in third parties.

23. Independent Developments. Nothing contained In the Agreement will prevent either Phenogen or MSK from entering into research projects with third parties which are similar to the Plan herein, or from independently developing (either through third parties or through the use of Its own personnel), or from acquiring from third parties, technologies or products which are similar to and competitive with Inventions resulting from the Plan. Further, nothing herein will be construed to grant either Party any rights in any such independently developed technologies or products so developed or acquired as described In this section or any rights to the revenues or any portion thereof derived by the other from the use, sale, lease, license or other disposal of any such technologies or products. Furthermore, nothing herein wlll preclude either Party from transferring any such technologies or products to others including to users of the Intellectual Property resulting from the Plan.

24. Export Controls. Phenogen acknowledges that any information or materials provided by the other Parties under this Agreement may be subject to U.S. export laws and regulations, including the International Traffic in Arms (ITAR) Regulations (22 CFR Chapter I, Subchapter M, Parts 120-130), Export Administration Regulations (EAR) (15 CFR Chapter VII, Subchapter C, Parts 730-774}, Office of Foreign Assets Control (OFAC) Regulations (31 CFR, Subtitle B, Chapter V), and Assistance to Foreign Atomic Energy Activities (10 CFR Part 810); each of Phenogen and MSK agrees to comply with all such laws. Because MSK is an academic Institution and has many faculty, staff. students, and visitors who are foreign persons, MSK intends to conduct the Plan as fundamental research under the export regulations, such that the results generated by MSK qualify as “public domain” under ITAR Parts 120.10 and 120.11 or “publicly available” under EAR Parts 734.3(b)(3) and 734.B{a,b). Phenogen will not knowingly disclose, and will use commercially reasonable efforts to prevent disclosure to MSK of any Information subject to export controls under the ITAR’s United States Munitions List (USML, 22 CFR Part 121), the EAR’s Commerce Control List (CCL, 15 CFR Part 774 and Supplements), or 10 CFR Part 810 Restricted Data or Sensitive Nuclear Technology. If for purposes of the research, Phenogen Intends to disclose export-controlled information to MSK, Phenogen will not dlsclose such Information to MSK unless and until a plan for transfer, use, dissemination and control of the Information has been approved by MSK. If Phenogen learns of an export control classlflcatlon by the U.S. or any other government during the course of the research, Phenogen shall Inform MSK of such promptly. In the event Phenogen Inadvertently (i) discloses export controlled Information or (ii) breaches this Article 23, deadlines contemplated by the research will be adjusted based on the time it takes to address the disclosure. Phenogen represents and agrees that it shall not export from the U.S. directly or Indirectly, or transfer to a non-U.S. Person located in the U.S., *any* technical Information (or the direct product thereof) furnished to Phenogen either directly or indirectly by MSK without first complying with all requirements of all relevant U.S. export regulations, including any government license requirements, if applicable. Phenogen agrees to indemnify, defend and hold harmfess MSK, its officers, agents and employees from all liabllity involving the violation of such export regulations, either directly or indirectly by Phenogen. Phenogen acknowledges It may be subject to criminal liability under U.S. laws for the Phenogen’s failure to obtain any required export licenses.

25. Force Majeure. Each of the parties wlll be excused from performance of the Agreement only to the extent that performance Is prevented by conditions beyond the reasonable control of the Party affected. The parties will, however, use their reasonable efforts to avoid or cure such conditions. The Party claiming such conditions as an excuse for delaying performance will give prompt written notice of the conditions, and its intent to delay performance, to the other Parties and will resume Its performance as soon as performance is possible.

26. Counter arts. This Agreement may be executed by one or more counterparts by the Parties by signature of a person having authority to bind the Party, each of which when executed and delivered by facsimile, electronic transmission or by mail delivery, will be an original and all of which will constitute but

one and the same Agreement.

SIGNATURES ON THE FOLLOWING PAGE

To show their agreement, authorized representatives of the parties have signed duplicate counterparts below.

THE CHANCELLOR, MASTERS AND
SCHOLARS OF THE
OF THE UNIVERISTY OF CAMBRIDGE

By: /s/ Jamie Whitaker
Name: Jamie Whitaker
Title: Senior Contracts Manager
Date: *10-1-18*

I, the undersigned Project Manager will use reasonable efforts to uphold my obligations and responsibilities set forth in this Agreement.

By: /s/ Antonis Antoniou
Name: Antonis Antoniou
Date: 17/1/2019

PHENOGEN

By: /s/ Dr. Paul Kasian
Name: Dr. Paul Kasian
Title: CEO
Date: 3/1/19

I, the undersigned Project Manager will use reasonable efforts to uphold my obligations and responsibilities set forth in this Agreement.

By: /s/ Erika Spaeth Tuff
Name: Erika Spaeth Tuff
Title: Director of Clinical Affairs and Medical Education

MEMORIAL SLOAN
KETTERING
CANCER CENTER

/s/ Gregory Raskin, MD
Gregory Raskin, MD

Vice President
Technology Development
Date: Jan 7, 2019

I, the undersigned Project Manager will use reasonable efforts to uphold my obligations and responsibilities set forth in this Agreement.

By: /s/ Mark Robson
Name: Mark Robson
Date: Jan 7, 2019

Exhibit A
Research Plan

cambridge shall provide the algorithm and related information to Phenogen to enable Phenogen to generate ‘Polygenic Risk Scores for BRCAl and BRCA2 mutation carriers. Phenogen shall provide the Polygenic Risk Scores to MSKCC to enable the MSKCC Scientist to apply those as part of a research project which will aim to provide more personalised cancer risks for women with BRCAl and BRCAZ mutations and which will allow for informed decisions about the clinical management of women with BRCA1/2 mutations. All results shall be shared with Cambridge for research purposes.

Deliverables from Study-MSl(CC

1. MSK Pl will provide Company with a list of 200 (comprised of Breast, Ovarian, and combination Breast and Ovarian samples) Single nucleotide polymorphisms (SNPs) and small insertions and deletions (InDeis) to genotype including the following identifiers: rslD#; Locus; GRCh38/hg38 Nucleotide position; Name of Nearest gene/Gene of Interest; Reference Allele; Effect Allele; (pending NYS: BRCAl weight; BRCAl weight). In addition, MSK Pl will provide the odds ratio and anv addltlonal mathematical formulas necessary to calculate the appropriate polvgenic risk scores specific to the BRCA-subtype.

2. MSK Pl will sign off on the proposed assay design of the 116 SNPs and 1nDels

3. MSK Pl will sign off on a validation summary of the 116 SNP assay as the recognition of the Subject Specimen shipment “start-date” [to the lab)

4. MSK Pl will provide projected Study initiation date with at least 4 weeks notice to allow for kit shipment.

S. MSK Pl will follow kit collection procedures according to instructions provided by Company

6, Provide the following on Test requisition form,

a. The BRCA1 or BRCA2 carrier status of Subject (pending confirmation with NYS).

b. The ethnicity of the Subject-limited to Caucasian for this study

c. The age of the Subject

7. Upon study initiation following Subject enrollment, Company requests MSK Pl ship at minimum 12 patient specimen before expecting results to allow for appropriate batching

Deliverables from the Company;

1. Company will design, order and validate the genotyping assay for up t 200 SNPs and lnDels as requested by the MSK Pl within 6 months of the receipt of the comprehensive SNP list including the associated odds ratios for each patient specific-scenario (ie; breast, ovarian, *BRCA1, BRCA2)* and any additional mathematical formulas that are crucial to the results delivery.

2. Upon completion of probe design, prior to placing order, Company will provide MSK Pl with a summary of assay design expectations associated with each rslD#. This may include but is not limited to, listing the surrogate SNP / lnDel that may be used In LD with one of the 116 SNPs. ·

3. Company will provide MSK Pl a 1-page validation summary Identifying the completion of the assay and signifying Company Is ready for Specimen collection/shipment to commence

4. Company will provide a bulk shipment of buccal swab kits for a total of 115 Subjects arriving no later than **a week** prior to Study initiation.

5. Company will provide genotype reports to the MSK Pl Including the rslO#; Chr#; GRCh38/hg38 Nucleotide position; Name of Nearest gene/Gene of Interest; the reference allele; the Subject’s allele and the associated weights.

6. Company will provide polygenic risk score specific to 8RCAl carriers, *BRCA2* carriers.

7. Maximum no-call-rate of Specimen will be 5%

8. Test turnaround time will be dependent on sample accrual. Company will make an effort t.o provide results within *3* weeks, but this will be determined by the number of samples we receive at one time-we batch samples, and need to run at least 12 at a time. Turn around time will be extended as long as it takes to place 12 patient specimen on an array.

9 MSK Pl will be notified for redraw If Specimen failed to meet the acceptble quantity/quality (QC) following extraction.

New kit will be provided by Company.

Exhibit 10.4

Master Collaboration Agreement

Date	13th September, 2019
Parties	Genetic Technologies Limited
	ACN 009 212 328 of 60-66 Hanover Street, Fitzroy, Victoria 3065, Australia
	(GTG)
	The Translational Genomics Research Institute
	of 445 North Fifth Street, Suite 600, Phoenix, Arizona 85004, USA
	(TGen)
Recitals	The purpose of this Master Collaboration Agreement ("Agreement") is to establish a master agreement between TGen and GTG, under which TGen and GTG agree to specific projects detailed in the Exhibits incorporated herein.

The Parties agree, in consideration of, among other things, the mutual promises contained in this Agreement as follows:

1. Definitions and Interpretation

1.1 Definitions

In this Agreement:

Commencement Date	means date that the Parties execute this Agreement.
Confidential Information	means, proprietary or confidential information of, or supplied by the disclosing Party that:

(a) is by its nature confidential;

(b) is designated as confidential; or

(c) the receiving Party generally knows or ought to know is confidential;

and includes information:

(d) comprised in or relating to any intellectual property rights;

(e) concerning the internal management and structure, personnel, processes and policies, commercial operations, financial arrangements or affairs of the disclosing Party;

(f) relating to the clients or service providers of the disclosing Party; and

(g) this Agreement, including without limitation the information in any Exhibits hereto.

but does not include information that a Party can establish through written documentation:

(h) was already in the possession of the receiving Party and not subject to an obligation of confidentiality:

(i) was lawfully received by the receiving Party from a third party lawfully having possession of and the right to disclose such information, or was independently developed without use of, access to, or reference to the other Party's Confidential Information by the receiving Party; or

(j) is public knowledge, obtained other than through a breach of, or an obligation of confidentiality between the Parties.

Term Is set forth in Clause 4.

Agreement means this document and all of its Exhibits.

TGen Material means any material provided by TGen or on behalf of TGen to GTG in connection with this Agreement.

Parties means the Parties to the Agreement.

Projects means the projects as described in individual Exhibits executed between TGen and GTG.

GTG Material means any material provided by GTG or on behalf of GTG to TGen in

connection with this Agreement.

Exhibit	means an Exhibit to this Agreement, which shall be individually numbered and executed by each of TGen and GTG.

2. Inconsistency between the Agreement and Exhibits

If there is any inconsistency between an Exhibit and this Agreement, the Exhibit will prevail to the extent of the inconsistency.

3. Scope

This Agreement serves as a master agreement between the Parties and sets forth the terms and respective rights and obligations of Parties for purposes of the Project(s) conducted hereunder. Each Project will be reflected in its respective Exhibit, which will be individually numbered and executed by the Parties and incorporated by reference herein.

Each Exhibit describing a Project may include, as applicable and without limitation: (a) the work and other activities that each Party will undertake to perform the Project, (b) any applicable milestones, deliverables and timelines, (c) any samples, materials, equipment or other tangible items provided by one Party to the other, (d) the participating personnel of each Party, including the Principal Investigator (or the equivalent) for each, and (e) a budget, any payments to be made by one Party to the other, or on the other's behalf, and any related payment due dates. Each Exhibit and this Agreement shall constitute the entire agreement for the applicable Project.

4. Term

This Agreement will commence on the Commencement Date and continue in effect for three (3) years from the Commencement Date ("Term"), whereupon it will expire unless extended by mutual agreement of the Parties or terminated earlier pursuant to Clause 15.

5. Obligations of the Parties

GTG and TGen each agree to conduct the activities and fulfil the obligations under the Exhibits for each Project in accordance with all applicable laws, rules and regulations, including, without limitation, data protection and privacy laws and all applicable U.S. export and import control laws; provided however, the foregoing is not intended to subject TGen to any foreign laws, rule or regulations in connection with this Agreement.

6. Compensation

2.1 The terms of compensation for each Project shall be set forth in the applicable Exhibit for such Project, including expense reimbursement and budgets and any other applicable terms.

2.2 In the event any Project, or this Agreement, is terminated pursuant to Clause 15, the Party conducting the work shall be compensated for all reasonable fees, costs and expenses incurred in connection with work performed under each terminated Project that have been incurred or are due or owed as of the effective date of termination and reimbursed for any and all non-cancellable obligations to third parties in existence as of the date of termination.

7. Relationship of the Parties

The Parties are independent entities. The Parties agree that nothing in this Agreement shall be construed to create any relationship of principal and agent, partnership or joint venture or employer/employee between the Parties. No Party shall have any right, power or authority, express or implied, to bind the other Party.

8. Limitations

EACH PARTY PROVIDES ALL WORK CONDUCTED UNDER THIS AGREEMENT "AS IS' AND MAKES NO REPRESENTATIONS OR WARRANTIES THERETO, EXPRESS OR IMPLIED. EXCEPT FOR ANY BREACH OF CONFIDENTIALITY OR OBLIGATION TO INDEMNIFY HEREUNDER , THE PARTIES SHALL BE LIABLE ONLY FOR ACTUAL DAMAGES. IN NO EVENT SHALL EITHER PARTY HAVE ANY LIABILITY TO THE OTHER PARTY OR TO THIRD PARTIES FOR ANY INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, EVEN IF SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY THEREOF. THE ALLOCATIONS OF LIABILITY IN THIS SECTION REPRESENT THE AGREED AND BARGAINED-FOR UNDERSTANDING OF THE PARTIES WITH RESPECT TO THE RISKS INHERENT IN THEIR RELATIONSHIP.

9. Confidentiality

9.1 Each Party must not, and must ensure that its officers, employees, agents and subcontractors do not, use or disclose the Confidential Information of the other Party without the other Party's consent, other than in accordance with this Clause 9.

9.2 Each Party may disclose the other Party's Confidential Information:

(a) to its affiliates, officers, employees, agents and sub-contractors to the extent necessary for the performance of a Party's obligations under this Agreement, provided that the disclosing Party makes such persons aware that the information is confidential and such persons are otherwise under obligation of confidentiality with the receiving Party to maintain the Confidential Information in confidence under terms at least as strict as the terms hereunder;

(b) if specified, permitted or directed in writing by the other Party;

(c) where this Agreement specifically requires disclosure to a third party; or

(d) with the written consent of the other Party.

9.3 The receiving Party may have the right to use or disclose Confidential Information of the disclosing Party to the extent required by applicable law or regulation, provided that the receiving Party gives the disclosing Party prompt and advanced written notice of such requirement and sufficient opportunity to object to the use or disclosure of the Confidential Information, or to request confidential treatment of the Confidential Information prior to any disclosure

9.4 Each Party must keep the other Party's Confidential Information in a secure location so that no unauthorised person is able to gain access to it.

9.5 The receiving Party is obligated to maintain confidentiality of the disclosing Party's Confidential Information in accordance with this Clause 9 for a period of five (5) years following the termination or expiration of this Agreement. Upon the request of either Party, or the expiration or earlier end of this Agreement, TGen will return all GTG Confidential Information remaining in its possession to GTG and GTG will return all TGen Confidential Information remaining in its possession to TGen.

10. Intellectual Property Rights and Material Transfer

10.1 All TGen Material, Confidential Information, and intellectual property owned by TGen prior to entering into this Agreement which is used (or is proposed to be used) in connection with this Agreement, shall remain the sole property of TGen.

10.2 All GTG Material Confidential Information, and intellectual property owned by GTG prior to entering into this Agreement which is used (or is proposed to be used) in connection with this Agreement, shall remain the property of GTG.

10.3 Subject to Sections 10.1 and 10.2, ownership and management of any intellectual property developed, in connection with a Project or this Agreement, or any standards for data management and protocols for data sharing, and terms governing publications in connection with a Project will be set out between the Parties in a separate written agreement.

11. Indemnity

11.1 Each Party indemnifies the other Party, and their respective directors, officers, employees and agents (collectively referred to as “the lndemnitees”) from and against any loss, liability, damage or expense (including reasonable legal costs) arising from any third party claim, action, suit, demand or proceeding that may be made or brought against any lndemnitee as a result of:

(a) any Party’s negligence and wilful malfeasance in the performance of this Agreement; and

(b) any material breach of this Agreement by that Party.

11.2 Indemnification Procedures. In the event that any lndemnitee is seeking indemnification under this Section 11 from the other Party (“Indemnifying Party”), the lndemnitee shall notify the Indemnifying Party of such claim with respect to such lndemnitee as soon as reasonably practicable after the lndemnitee receives notice of the claim, and the Party (on behalf of itself and such lndemnitee) shall permit the Indemnifying Party to assume direction and control of the defense of the claim (including the right to settle the claim solely for monetary consideration) and shall cooperate as requested (at the expense of the Indemnifying Party) in the defense of the claim. The indemnification obligations under this Section 11 shall not apply to any harm suffered as a direct result of any delay in notice to the Indemnifying Party hereunder or to amounts paid in settlement of any claim, demand, action or other proceeding if such settlement in effected without the consent of the Indemnifying Party, which consent shall not be withheld or delayed unreasonably. The lndemnitee, its employees and agents, shall reasonably cooperate with the Indemnifying Party and its legal representatives in the investigation of any claim, demand, action or other proceeding covered by the entirety of this Section 11.

11.3 The indemnity given pursuant to Clause 11.1 will be reduced proportionally to the extent of contribution by the other Party to any such loss, damages or expenses.

12. No assignment and subcontracting

12.1 Each Party hereby represents and warrants to the other that it has full legal power to enter into this Agreement, and that this Agreement is its valid and binding obligation. Each Party agrees that it will not assign, transfer, subcontract or novate in whole or part or create any security interest over or otherwise deal with in any way its interest in this Agreement, without the prior written consent of the other Party.

12.2 Neither Party will subcontract its obligations under this Agreement without the prior written consent of the other Party. If a Party is permitted to subcontract its obligations under this Agreement, that Party will remain responsible for its obligations under this Agreement.

12.3 Each Party covenants and agrees that, during the Term of this Agreement and for a period of twelve (12) months thereafter, such Party shall not, directly or indirectly, (i) recruit, hire or attempt to recruit or hire any employees of the other Party or its subsidiaries and (ii) induce or contact or communicate with any employees of the other Party for the purpose of inducing any such employees to terminate their employment with the other Party.

12.4 The Parties hereby agree that this Agreement and each Project involves, among other activities, making introductions for, participating in, effectuating and consummating transactions between the Parties and their respective third party contacts (each, a "Transaction"). In consideration of the foregoing and the terms of this Agreement, during the Term of this Agreement and for a period of twelve (12) months thereafter, each Party hereby covenants and agrees that it shall not, directly or indirectly, interfere with, circumvent, attempt to circumvent, avoid or bypass the other Party in or from any Transactions involving the other Party's third party contacts introduced in writing to the other Party for the sole purpose of consummating a Transaction.

13. Resolution of Dispute

Except as is allowed herein to the contrary within this Agreement, any controversy, dispute or claim arising out of, in connection with, or in relation to the interpretation, performance or breach of this Agreement, or any amount due hereunder, including, without limitation, any claim based on contract, tort, or statute shall be settled as follows: The Parties shall initially meet to attempt to resolve disputes. If the Parties cannot resolve such disputes within seven (7) days after a Party requests such a meeting, then such controversy, dispute or claim shall be settled, solely and exclusively, by arbitration. Any arbitration pursuant to this Agreement shall be conducted in Los Angeles, California before and in accordance with the then existing Commercial Dispute Resolution Procedures through the American Arbitration Association, using an arbitrator mutually selected by both Parties in from a list of those designated by the American Arbitration Association or, if the Parties disagree, otherwise appointed by the American Arbitration Association. Any arbitration shall be final and binding. The findings shall be delivered in a written opinion with findings of facts based on the record. Any judgement upon any interim or final award or order rendered by the arbitrator may be entered by any State or Federal court having jurisdiction thereof. The Parties intend that any agreement pursuant hereto to arbitrate be valid, enforceable and irrevocable. Each Party in any arbitration proceeding commenced hereunder shall bear such Party's own costs and expenses (including expert witness and attorney's fees) of investigating, preparing and pursuing such arbitration claim. Notwithstanding the foregoing, at any time, a Party may seek or obtain preliminary, interim or injunctive or conservatory measures from either the arbitrators or from a court.

14. Notices

Any notice or other communication to be given under this Agreement must be in writing and may be delivered by hand delivery or commercial overnight courier service with tracking

capabilities or sent by certified mail (return receipt requested), all of the foregoing costs and postage prepaid, to the other Party at its address set out in the signature page or such other address as a Party may specify for the other by written notice.

15. Termination

15.1 Either Party may at any time terminate this Agreement or an Exhibit and the applicable Project, unless otherwise specified in an Exhibit, by providing ninety (90) days' advance written termination notice to the other Party that this Agreement or the applicable Exhibit and Project will terminate.

15.2 If a Party is in material breach of the terms of this Agreement or a Project, the other Party may give the Party in breach written notice of the breach and a reasonable period (not less than thirty (30) days) in which to remedy the breach. If the Party receiving notification does not remedy the breach within the period specified in the notice, then the Party claiming there has been a breach may immediately terminate this Agreement or the applicable Project.

15.3 Should a Party breach this Agreement in such a way that the breach is not capable of remedy, the other Party may immediately terminate this Agreement by giving written notice.

15.4 Upon providing or receiving (as applicable) notice of termination of this Agreement or any Projects hereunder, to the extent practicable, each Party shall immediately cease all work in progress under the applicable Projects, ***unless*** otherwise requested in writing by the other Party. Each Party shall cooperate with the other Party to provide for an orderly wind-down of all uncompleted activities under each Projects for which notice of termination has been given.

16. Modification and Waiver

16.1 This Agreement and any Exhibits may only be modified or amended by written agreement by the authorized signatories of both Parties which is identified as an amendment to this Agreement.

16.2 A right under this Agreement will only be waived where the waiver is in writing and is signed by the relevant Party.

16.3 A waiver by either Party will not prejudice its rights in respect of any subsequent breach of this Agreement by the other Party.

17. General

17.1 Governing law and jurisdiction

The Agreement shall be governed and construed in accordance with the federal laws of the United States, as applicable, and the laws of the State of Delaware without regard to conflicts of law principles and without regard to the 1980 U. N. Convention on Contracts for the International Sale of Goods. Except in respect of an action commenced by a third party in another jurisdiction, the Parties agree that any legal suit, action, mediation or proceeding arising out of or relating to this Agreement must be instituted exclusively in the United States federal court for the District of Delaware, and the Parties hereby irrevocably submit to such jurisdiction.

17.2 Costs

Each Party will bear its own costs (including legal costs) incurred in connection with the negotiation, preparation, execution and delivery of this Agreement.

17.3 Entire Agreement

This Agreement constitutes the entire Agreement between the Parties in relation to the subject matter under this Agreement. Any prior memorandums of understanding, arrangements, agreements, representations or undertakings are superseded hereby. This Agreement shall not be construed, either expressly or implicitly, to grant either Party any license or other rights except as specified herein.

17.4 No reliance

No Party has relied on any statement by another Party which has not been expressly included in this Agreement.

17.5 Counterparts

This Agreement may be executed in any number of counterparts, each signed by one or more Parties. Each counterpart when so executed is deemed to be an original and all such counterparts taken together constitute one document.

17.6 Use of Name

Neither Party shall use the other Party's or its affiliates' names, trademarks or logos in any way, including without limitation in any public notice or press release, or imply that this Agreement is an endorsement of any such service or product by the other Party or its affiliates without the other Party's prior written consent.

17.7 Clauses that survive termination

(a) Without limiting or impacting upon the continued operation of any clause which as a matter of construction is intended to survive the termination or expiry of this Agreement, Clauses 8-11and this Clause 17 survive the termination or expiry of this Agreement.

(b) Each indemnity contained in this Agreement is a continuing obligation, independent from the other obligations of the Parties and survives the termination or expiry of this Agreement. It is not necessary for a Party to incur expense or make payment before enforcing a right of indemnity under this Agreement.

17.8 Severability

In the event any provision of this Agreement is held to be invalid or unenforceable, the remainder of this Agreement shall remain in full force and effect as if the invalid or unenforceable provision has never been part of this Agreement.

Execution

Executed as an agreement:

Executed by **Genetic Technologies Limited**
ACN 009 212 328 in accordance with
section 127(1) of the *Corporations Act 2001*
(Cth) by:

/s/ Dr Paul Kasian	/s/ Dr Richard Allman
Signature of Director/Company Chairman	Signature of Chief Scientific Officer
Dr Paul Kasian	Dr Richard Allman
Full name	Full name

GTG Address for Notices:
Richard Allman
Chief Scientific Officer
Genetic Technologies Limited 60 Hanover Street
Fitzroy VIC 3065
+61 418453072
Richard.allman@gtglabs.com

Executed by The Translational Genomics
Research Institute by:

TGen Address for Notices:

Tess R. Burleson
Chief Operating Officer

TGen
Attn: Chief Operating Officer
445 N. 5th Street, Suite 600
Phoenix, AZ 85004 USA
Email: **tburleson@tgen.org**
With copy to same address:
TGen Legal Department
Email: contracts@tgen.org

Date (print)

Exhibit 10.5

EXHIBIT A-1

This Project No. 01 (the "Project") entitled "GeneType Pilot Study(ies): Design and Feasibility" is dated as of 13tl' September, 2019 (the "Effective Date"), and shall be undertaken under that certain Master Collaboration Agreement (the "Agreement") by and between Genetic Technologies Limited ("GTG") and The Translational Genomics Research Institute ("TGen"), dated as of 13 th September, 2019 and incorporated into the Agreement as an Exhibit. Each of GTG and TGen may hereafter be referred to in this Project individually as a "Party'' and collectively as the "Parties." This Project shall commence on the Effective Date and continue until the end date of the tenn of the Project, listed below.

Title of the Project: GeneType Pilot Study(ies): Design and Feasibility

GTGPI: Dr. Richard Allman

PROJECT LEADERS: Drs. Richard Allman and David Duggan

TGEN PI Dr. David Duggan

Term of Project: 3 months from Effective Date

A. GENERAL OVERVIEW:

Genetic risk scores (GRSs) including those developed by GTG and published by TGen are known to have clinical validity as supported by the peer-reviewed literature in both breadth and depth. The literature supports how genetic risk score(s) being analyzed are related to tl1e risk of developing a specific disease and a person's future clinical status and distinguish individuals with a specific disease when compared to healthy individuals for a number of diseases today.

The purpose of this Project is to design studies to support the translation of GRSs to the clinic and the clinical utility. In the narrow sense, clinical utility refers to the ability of a screening test to prevent or ameliorate adverse health outcomes such as mortality, morbidity, or disability through adoption of efficacious treatments conditioned on test results [Khoury MJ Genet Med 2003 ;5:261-268]. In the broad sense, any use of a test result to inform clinical decision-making and to influence outcomes not directly related to health status including outcomes important to individuals and families are considered as constituting evidence of clinical utility [Grosse et al. Genetics in Medicine 2006;8:448-450]. From the clinical perspective, earlier and/or more frequent screening and/or risk reduction via therapeutic intervention, for example, may constitute the basis of clinical utility, even absent data on health outcomes.

The ability to predict the risk of developing a disorder at a later time may be viewed by many people as important benefits even in the absence of specific interventions to reduce morbidity or mortality. For example, a survey of preferences for adult cancer screenings reported that the majority of respondents considered screening to be of value even if positive test results would not lead to any change in action or outcomes and regardless of invasive procedures after false-positive screens [Schwartz et al. JAMA 2004;291:71-78].

With this as background, the goal of thi s Project is to design and assess feasibility of clinical research studies to support the clinic utility of the GRSs as described in greater detail below.

B. DELIVERABLES

Ultimately, GTG wishes to partner with TGen to conduct clinical research study(ies) with one or more of its current healthcare partners or a yet to be identified healthcare partner suggested by TGen or

GTG. The main objective of the study(ies) will focus on the clinical utility of the GeneType Breast and Colorectal Cancer GRSs tests developed by GTG.

Data will be collected as part of this research, including any data regarding the benefits and risks that accrue from both positive and negative results, and is key before a genetic test like GeneType Breast and Colorectal Cancer can be generally accepted in clinical practice . Questions of interest include but are not limited to: (1) patient acceptance, (2) physician acceptance , (3) changes to clinical management (e.g., is the physician acting on the information provided in the report), (4) is the intervention changing (a) screening rates, (b) prevention approach(es), (5) detection rates, and or (6) identifying disease at an earlier stages.

The goals of this Project will focus on (i) identifying the specific clinical utility question(s), (ii) determining the requirements and resources needs for the specific clinical utility question(s), and (iii) feasibility discussions with potential third party partners (e.g., healthcare providers) where the clinical studies will be performed. Once a healthcare partner(s) has been identified and agreed to be a partner, subsequent project(s) will focus on operationalizing and implementation of the study(ies) at one or more sites.

lProject Reporting

TGen will provide a written report (the "Report") documenting the following outcomes:

1. Specific clinical utility questions
2. Requirements and resources required for execution of that study(ies)
3. Confirmation of 3rd party physician "willingness to participate"
4. Any physician feedback regarding study designs and logistics
5. Identification of any supporting documentation or materials required to initiate the pilot studies

Both Parties WILL PERFORM THE FOLLOWING SERVICES & DELIVERABLES:

1. Identify the exact clinical utility question(s) for study
2. Describe the experimental design(s) for either GeneType Breast Cancer or GeneType Colorectal Cancer or both
3. Identify potential third party clinical partner(s)
4. Assess interest level from third party partner(s)to participate in a study
5. Secure commitment from third party partner(s) to participate in study discussions

TGen WILL PERFORM THE FOLLOWING SERVICES & DELIVERABLES:

1. Travel to third party partner(s) site(s) for in-person meetings

2. Determine the preliminary resources and requirements needed to operationalize and execute the study(ies)

3. Provide project management support

4. Provide cost estimate support

GTG WILL PERFORM THE FOLLOWING ACTIVITIES TO FACILITATE DELIVERABLES FROMTGEN.

1. Provide evidence in support of the clinical validity for GeneType Breast Cancer and GeneType Colorectal Cancer
2. Provide budgetary support listed below in Section C.

C. COST

In exchange for the services detailed throughout and requested by GTG ofTGen, TGen is requesting budgetary support of $125,000.

Note: Costs for any third party participation in the Project are not included in these costs and will be estimated by third party once third party has been identified and contracted. These costs to be mutually agreed upon by the Parties prior to being incurred.

Payment Schedule:

- $62,500 to be paid to TGen on Effective Date
- $62,500 to be paid to TGen upon receipt by GTG of the Report, in form and substance satisfactory to GTG.

D. Term:

The Term of the Project is 3 months from execution of this Exhibit A-1.

This Exhibit A-1 is executed effective as of the date set forth above :

Executed by **Genetic Technologies Limited ACN 009 212 328**
in accordance with section 127(1) of the *Corporations Act 2001*
(Cth) by:

/s/ Richard Allman
Signature of Chief Scientific Officer
Full name: Richard Allman

Signature of Director /Company Chairman

Full name: Paul Kasian

Executed by The Translational Genomics Research Institute by:

/s/ Tess R. Burleson
Tess R. Burleson
Chief Operating Officer

9/19/2019
Date (print)