



Technology Development & Commercialization

SPONSORED RESEARCH AGREEMENT

This Sponsored Research Agreement (the "Agreement", as further defined below) is made as of June 1, 2020 (the "Effective Date") and is between the following parties:

UNIVERSITY HEALTH NETWORK

An Ontario not-for-profit corporation incorporated under the *University Health Network Act, 1997*, having a business office at 101 College Street, Suite 150, Heritage Building, MaRS Centre, Toronto, Ontario, Canada, M5G 1L7
("UHN")

- and -

PharmaTher Inc.

A corporation incorporated under the laws of the Province of Ontario, having its principal office at 82 Richmond Street East, Toronto, Ontario, M5C 1P1
("Sponsor").

(Each a "Party" and collectively the "Parties")

BACKGROUND:

- A. UHN desires to have Dr. Phedias Diamandis ("Principal Investigator") direct research activities that will give the Sponsor exclusive early access to research findings and an option to commercialize intellectual property in such research findings.
- B. The Sponsor is willing to provide financial support to UHN for the research activities and to have the project directed by the Principal Investigator in a manner compatible with UHN's role in research and teaching related to health care.
- C. The research activities will advance the research interests of UHN and the Principal Investigator.
- D. The Principal Investigator is willing to assume direction of the project in accordance with UHN policies and practices.

IN CONSIDERATION for the mutual promises, representations, covenants and agreements of the Parties made in this Agreement, and for other good and valuable consideration (the receipt and sufficiency of which are hereby acknowledged) the Parties agree as follows:

ARTICLE 1 – INTERPRETATION

1.1 Defined Terms. For the purposes of this Agreement, the following terms shall have the respective meanings set out below and grammatical variations of such terms shall have corresponding meanings:

- (a) **“Agreement”** means this Sponsored Research Agreement and all Schedules attached hereto, and the terms “herein”, “hereunder”, “hereto” and such similar expressions shall refer to this Agreement;
- (b) **“Applicable Law”** means any law, rule, statute, regulation, order, judgment, decree, treaty, directive or other requirement in force at any time during the Term which applies to or is otherwise intended to govern or regulate the Parties, and any property, transaction, activity, event or other matter associated with, or arising from, this Agreement. This includes, but is not limited to, all applicable statutes and regulations and applicable guidelines set forth by the Canadian Institutes of Health Research (CIHR), National Institutes of Health (NIH), and other governmental agencies (as relevant and/or applicable) pertaining to UHN activities and governance;
- (c) **“Background Intellectual Property”** means Intellectual Property of a Party that is in existence on the Effective Date, or arises otherwise after the Effective Date from activities not conducted pursuant to the Research Program and shall include, without limitation, the Intellectual Property further described in Schedule C;
- (d) **“Confidential Information”** of a Party means any and all information of a Party and/or any of its affiliates (in this definition called the **“Disclosing Party”**) which has or will come into the possession or knowledge of the other Party and/or any of its affiliates (in this definition called the **“Recipient Party”**) in connection with or as a result of entering into this Agreement including information concerning the Disclosing Party's past, present and future customers, suppliers, technology, markets, research and business. For the purposes of this definition, “Confidential Information” includes any and all Intellectual Property, licensed IP, product, commercial, research, scientific, customer, or market information, analyses or conclusions drawn or derived therefrom, this Agreement and information developed or disclosed hereunder, or any Party's raw materials, processes, formulations, analytical procedures, methodologies, products, samples, specimens, functions, know-how, data, patents, copyrights, trade secrets, processes, techniques, programs, designs, formulae, marketing, advertising, financial, commercial, sales or programming materials, written materials, compositions, drawings, diagrams, computer programs, studies, work in progress, visual demonstrations, ideas, concepts, and other data, in oral, written, graphic, electronic, or any other form or medium whatsoever. Confidential Information shall not include or encompass information and materials which:
 - (i) are part of the public domain, or becomes part of the public domain without breach of Section 6.1 herein,
 - (ii) are obtained by a Recipient Party from a third party who is not under a duty of confidentiality to the Disclosing Party in respect of the Confidential Information and said third party has a legal right to disclose it,
 - (iii) is identified in writing by a Disclosing Party as no longer constituting Confidential Information of said Disclosing Party,
 - (iv) is already known by a prospective Recipient Party at the time of disclosure to said Recipient Party, as said Recipient Party can demonstrate by its written records, or

- (v) is independently developed by a Recipient Party without access to or reliance on, the Confidential Information of the Disclosing Party, as said Recipient Party can demonstrate by its written records;
- (e) **"Contract Year"** means each successive twelve calendar month period during the Term. The first Contract Year shall begin on the Effective Date of this Agreement. The last Contract Year shall end on the day this Agreement expires, unless earlier terminated;
- (f) **"Effective Date"** shall have the meaning set forth in the introduction to the Agreement;
- (g) **"Intellectual Property" or "IP"** mean inventions (whether patentable or not), discoveries, written material, compounds, information, know-how, trade secrets, copyright, designs, plant breeders' rights, integrated circuit topographies, ideas (including any computer software), formulae, algorithms, concepts, proprietary data, techniques, instructions, processes, expert opinions, information, Materials, program listings, flow charts, logic diagrams, manuals, specifications, instructions, or any copies of the foregoing in any medium, or the expression thereof;
- (h) **"Intellectual Property Rights" or "IP Rights"** means any rights in Intellectual Property which a Party owns or is seeking to own, including any regular or provisional patent applications filed in the U.S., Canada or any other jurisdiction, divisions, continuations, patents issuing thereon or renewals, or reissues, and any and all patents and patent applications in other countries corresponding thereto in respect of Intellectual Property;
- (i) **"Invention"** means any Intellectual Property conceived and reduced to practice in the conduct of the Research Program that may form the subject matter of a patent;
- (j) **"Invention Notice"** means written notice of an Invention;
- (k) **"Parties"** means UHN and Sponsor collectively, and **"Party"** means either individually, as the context indicates;
- (l) **"Publication"** means any means of making available to the public information by way of speech, talk, paper, drawing, photograph, printed work, tape, video recording or other electronic means, or any other disclosure given or distributed;
- (m) **"Research Program"** means the research activities as further set out in Schedule A attached hereto (as may be amended from time to time); and
- (n) **"Term"** shall have the meaning provided in Section Article 10.

All other defined terms in this Agreement shall have the meanings as otherwise specified within the body of this Agreement.

- 1.2 **Sections and Headings.** The division of this Agreement into Articles, Sections and Subsections and the insertion of headings are for reference purposes only and shall not affect the interpretation of this Agreement. Unless otherwise indicated, any reference herein to a particular Article, Section, Subsection or Schedule refers to the specified Article, Section or Subsection of or Schedule to this Agreement.
- 1.3 **Number, Gender and Persons.** In this Agreement, words importing the singular number shall include the plural and vice versa, words importing gender shall include all genders and words importing persons shall include individuals, corporations, partnerships, associations, trusts, unincorporated organizations, governmental bodies and other legal or business entities.

- 1.4 **Including.** Where the word “including” or “includes” is used in this Agreement, it means “including (or includes) without limitation”.
- 1.5 **Remedies Cumulative.** Unless otherwise expressly stated herein, all rights and remedies of a Party under this Agreement are in addition to such Party’s other rights and remedies and are cumulative, not alternative.
- 1.6 **Currency.** All monetary amounts in this Agreement are in Canadian funds unless explicitly stated otherwise.
- 1.7 **Schedules.** The following Schedules are annexed to and form part of this Agreement:

Schedule A – Research Program & Activities

Schedule B – Budget

Schedule C – Background Intellectual Property
- 1.8 **Order of Priority.** In the event of any inconsistency between any of the provisions of the main terms and conditions of this Agreement and the Schedules, the inconsistency will be resolved by reference to the following descending order of priority: (i) the main body of this Agreement; (ii) the Schedules.
- 1.9 **Knowledge.** “To the knowledge”, unless otherwise qualified hereunder means a statement of the declarant’s knowledge of the actual facts or circumstances to which such phrase relates without having made any inquiries or investigations in connection with such facts and circumstances.

ARTICLE 2 – SCOPE OF WORK

- 2.1 **Research Program.** The Principal Investigator and UHN will carry out the Research Program as set out in Schedule A (as amended).
- 2.2 **Compliance.** The Research Program shall be carried out in accordance with Applicable Laws. There will be no use of human subjects under this Agreement. Any proposed sampling or use of human materials shall have the prior written approval of the UHN Research Ethics Board (REB).
- 2.3 **Restrictions.** No biological material, such as cells, genes, proteins, vectors or viruses, shall be transferred from UHN to the Sponsor unless UHN and the Sponsor execute a biological material transfer agreement.

ARTICLE 3 – PAYMENT

- 3.1 **Payment.** The Sponsor shall pay to UHN the total sum of \$ 140,000.00 CDN (inclusive of 40% institutional overhead) for the conduct of the Research Program, as set out in the Budget attached in Schedule B. Payments shall be paid according to the following schedule:

Agreement execution	\$25,000
Recruitment of mutually agreed personnel	\$45,000
6 months following the recruitment of mutually agreed personnel	\$70,000

- 3.2 **Payment Information.** Payments shall be made payable to “University Health Network” and sent to the following address:

University Health Network
Technology Development & Commercialization

Attention: Cheryl Szombati – Compliance Specialist
101 College Street – Suite 150
Heritage Building – MaRS Centre
Toronto, Ontario, Canada, M5G 1L7
T: (416) 581-7400

- 3.3 Interest.** All monies payable to UHN by Sponsor hereunder and not paid when due bear interest at the prime rate of interest quoted by the Bank of Canada, plus 10% (ten percent) per annum compounded monthly until the date paid to UHN.

ARTICLE 4 – REPORTS

- 4.1 Reports by Principal Investigator.** The Principal Investigator shall provide deliverables to Sponsor as specified in Schedule A.
- 4.2 Final Report by UHN.** UHN shall provide a final report to the Sponsor within sixty (60) days following the expiration or earlier termination of this Agreement. In the event of the earlier termination of this Agreement, a final report shall be provided instead of a progress report.

ARTICLE 5 – EQUIPMENT

- 5.1 Equipment Ownership.** UHN shall own all equipment, software or other materials purchased, licensed or developed by UHN or Principal Investigator under this Agreement unless there is a prior written agreement otherwise.

ARTICLE 6 – CONFIDENTIALITY, PUBLICATION & PUBLICITY

- 6.1 Confidential Information.** Subject to the provisions of this Agreement, the Parties agree that they will not use, distribute or disclose to any third party Confidential Information belonging to any other Party to this Agreement without the prior written consent of such Party, during, and for five (5) years after the expiration or earlier termination of this Agreement. Notwithstanding this confidentiality obligation, a Party shall be permitted to disclose Confidential Information without the prior written consent of the other Party to those of its employees, staff, researchers, research trainees, agents, advisors, accountants, auditors, shareholders, investors, potential investors, underwriters and others on a need to know basis under circumstances that reasonably ensure the confidentiality thereof, or to the extent required by Applicable Law. In the event that a Party is required to disclose the Confidential Information of the other Party by law or an order of a court, tribunal or government agency, said first Party shall promptly notify the other Party and give said other Party a reasonable opportunity to seek a confidentiality order or take other appropriate action in respect of the proposed disclosure.
- 6.2 Publication of Research Results.** Principal Investigator and UHN may publish the results of the Research Program in accordance with normal academic practices but subject to the following conditions: Principal Investigator and UHN shall grant Sponsor a thirty (30) day review period to review the proposed publication by UHN or the Principal Investigator. During the review period, the Sponsor may require UHN and the Principal Investigator to (i) remove any of Sponsor's Confidential Information, or (ii) delay the publication for up to a maximum of sixty (60) days to protect Sponsor's proprietary interests. For further clarification, the Principal Investigator and UHN may publish the results of the Research Program after the thirty (30) day review period elapses with no response from the Sponsor or after sixty (60) days if Sponsor requests a delay of the publication to protect Sponsor's proprietary interests.
- 6.3 Publicity.** Except as required by Applicable Law, no Party shall use the name(s), logo(s), trade-mark(s) or trade-name(s) of the other Party in connection with any products, publicity, promotion, news release,

advertising or similar public statements in respect of the Agreement and its subject matter, without the prior written consent of such other Party.

- 6.4 Permitted Disclosures.** Notwithstanding any provision of this Agreement, both Parties may, without requirement of any further consent of the other Party, disclose the following information pertaining to the Agreement: the Parties' names, Principal Investigator's name, Research Program title and general subject matter, Research Program duration, and the total funding to be received by UHN.

ARTICLE 7 – INTELLECTUAL PROPERTY

- 7.1 Background Intellectual Property.** No term or provision of this Agreement shall grant a Party any right(s) or interest to or in the other Party's Background Intellectual Property.
- 7.2 Research Program Intellectual Property.** As between the Parties, UHN shall own title to all Intellectual Property arising out of Research Program deliverables 4 and 6-9, as specified in Schedule A ("UHN Foreground IP"). Sponsor shall own title to all Intellectual Property arising out of Research Program deliverables 1-3 and 5, as specified in Schedule A ("Sponsor Foreground IP"). UHN shall be granted a non-exclusive, royalty-free, sublicensable license to practice such Sponsor Foreground IP for any purpose. Principal Investigator shall disclose any Invention and/or other Intellectual Property to UHN in writing in accordance with current UHN policy. UHN shall subsequently disclose said Invention or other disclosed Intellectual Property to the Sponsor by means of an "Invention Notice".
- 7.3 Filing of Patent Application.** Within thirty (30) days of Sponsor receiving the Invention Notice, the Sponsor may send notice to UHN requiring UHN to cause filing of patent application(s) in respect of the Invention at Sponsor's expense (in initial jurisdictions to be decided by the Parties) and Sponsor shall be further granted the "Option" further described in Section 7.4 below. Upon the filing of said patent application(s), UHN shall provide Sponsor with a copy of any such filed patent application(s). In the event that UHN (i) does not receive the above-noted notice in respect of the request for filing of patent application(s), or (ii) is informed by Sponsor (within the aforementioned thirty (30) day period) of its desire to not proceed with the filing of patent application(s), UHN may file patent application(s) for the Invention at its expense and in its sole discretion, and Sponsor shall not be granted the Option and shall have no further rights to said Invention.
- 7.4 "Option" Term & Provisions.** Subject to Section 7.3, UHN shall grant to Sponsor an exclusive Option to negotiate and execute a license to the UHN Foreground IP arising out of the Research Program. The Option shall last for a six (6) month period from the date on which the Sponsor first receives a copy of the patent application(s) pursuant to Section 7.3. Any license negotiation shall be conducted in good faith by the Parties and any license granted shall encompass terms and conditions typical in the industry for similar licenses. Notwithstanding, any such license shall contain term(s) and provision(s) wherein UHN shall reserve and retain its right(s) to the UHN Foreground IP to practice such UHN Foreground IP for its own educational or academic research purposes, with the further reservation and retention of its right to grant license(s) for similar such purposes.
- 7.5 Infringement.** Each of the Parties will promptly notify the other Parties of any infringement or threatened infringement of any Intellectual Property. Each Party will provide reasonable assistance to the other Parties in connection with assessing and resolving infringement or threatened infringement, but the Parties shall have no obligation to litigate or otherwise incur expense.

ARTICLE 8 – INDEMNIFICATION

- 8.1 Indemnification.** Subject to Article 9 below, each Party agrees to be responsible and to assume liability for its acts or omissions, and those of its directors, officers, agents, employees, staff or students, arising out of or as a result of, or in connection with the conduct of the Research Program, to the full extent required by law. A Party that is negligent or that breaches this Agreement agrees to indemnify, defend and hold the

other Party harmless from liability resulting from its negligence or breach, including, without limitation, legal fees and costs, except to the extent caused by the other Party, and each party agrees to maintain reasonable insurance coverage for such liabilities.

ARTICLE 9 – REPRESENTATIONS, WARRANTIES & LIABILITY

- 9.1 Sponsor Representation.** The Sponsor represents and warrants to UHN that the Sponsor has the power to enter into this Agreement and to perform its obligations, and that the Sponsor has taken necessary action for the execution of this Agreement to constitute a binding obligation enforceable against the Sponsor.
- 9.2 UHN Representation.** UHN represents and warrants to the Sponsor that UHN has the power to enter into this Agreement and to perform its obligations, and that UHN has taken necessary action for the execution of this Agreement to constitute a binding obligation enforceable against UHN.
- 9.3 EXCEPT AS EXPRESSLY PROVIDED IN THIS AGREEMENT, UHN AND THE PRINCIPAL INVESTIGATOR MAKE NO CONDITIONS, WARRANTIES, UNDERTAKINGS OF ANY KIND, INCLUDING WITHOUT LIMITATION, THE ORIGINALITY OR ACCURACY OF THE RESEARCH PROGRAM, INTELLECTUAL PROPERTY, INVENTIONS, PATENTS, OR PRODUCTS ARISING UNDER THIS AGREEMENT OR THE OWNERSHIP, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OF THE RESEARCH PROGRAM, INTELLECTUAL PROPERTY, INVENTIONS OR PRODUCTS ARISING THEREFROM.**
- 9.4 UHN AND THE PRINCIPAL INVESTIGATOR SHALL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, OR OTHER DAMAGES SUFFERED BY THE SPONSOR OR ANY OTHERS RESULTING FROM THE USE OF THE RESULTS OF THE RESEARCH PROGRAM, INTELLECTUAL PROPERTY, INVENTIONS, OR PATENTS. THE ENTIRE RISK AS TO THE DESIGN, DEVELOPMENT, MANUFACTURE, SALE OR OTHER DISPOSITION AND PERFORMANCE OF ITS PRODUCTS IS ASSUMED BY THE SPONSOR.**
- 9.5 Intellectual Property Representations and Warranties.** The Parties acknowledge that none of the Parties makes any representation or warranty with respect of the following: (a) whether any third party may have any right or interest in any Intellectual Property arising out the Research Program; (b) whether any Invention will be covered by any patent applications or issued patent, or by any division, continuation, reissue, reexamination or extension associated therewith. The Parties further acknowledge that it may be necessary to reach agreements with third parties in order to permit the use and exploitation of the results of the Research Program and of any Intellectual Property arising therefrom. The Parties acknowledge that the Principal Investigator, as a research specialist, has other sources of research grants and conducts independent, concurrent research in the area of the Research Program and that this independent, concurrent research may give rise to Intellectual Property to which Sponsor shall have no rights.

ARTICLE 10 – TERMINATION

- 10.1 Term.** This Agreement shall continue until completion of the Research Program (the “Term”), unless earlier terminated. While the Parties anticipate that the Research Program will be completed in a period of 12 months, the Parties acknowledge that there may be delays in the recruitment of mutually agreed personnel and interruptions due to the ongoing COVID-19 pandemic which may require extension of this anticipated timeframe.
- 10.2 Notice of Termination.** If the Sponsor fails to meet any of its obligations under this Agreement and does not remedy these failures within thirty (30) days after receipt of notice of the failure from UHN, or at any time the Sponsor fails to carry on business in the normal course or becomes insolvent, UHN may immediately terminate this Agreement by giving the Sponsor notice of termination. If UHN fails to meet any of its obligations under this Agreement and does not remedy these failures within thirty (30) days after receipt of notice of the failure from the Sponsor, or if UHN fails to carry on business in the normal course the Sponsor

may immediately terminate this Agreement by giving UHN notice of termination and such right to terminate shall be the Sponsor's sole remedy.

- 10.3 Replacement of Principal Investigator.** If the Principal Investigator is unavailable or unable to continue the direction of the Research Program for a period in excess of thirty (30) days, UHN shall notify the Sponsor and may additionally nominate one or more replacements. If no replacement is nominated by UHN, or if no nominee is satisfactory to the Sponsor, the Sponsor may terminate this Agreement upon thirty (30) days notice to UHN.
- 10.4 Expenses.** Upon the earlier termination of this Agreement, the Sponsor shall pay UHN for all reasonable expenses and un-cancellable commitments incurred as of the date of notice of termination, but the amount may not exceed the maximum payable under this Agreement.
- 10.5 Survival.** The Parties agree that Articles 3, 5 through 9, 11 through 13, and Sections 4.2, 10.4 and 10.5 of this Agreement shall survive the expiration or earlier termination of this Agreement, for such time as specifically stated in a particular Article/Section/Subsection, or in the absence of such specification until such time as the Parties mutually agree to the release of the obligations (in whole or in part) contained therein.

ARTICLE 11 – NOTICES

- 11.1 Notices.** All notices required or permitted to be given under this Agreement shall be in writing and may be effectively given if delivered personally or if sent by prepaid registered mail addressed as follows:

If to UHN:

Franco E. Rossetto, PhD, JD
Senior Director, Research Legal
University Health Network
101 College Street – Suite 150
Heritage Building – MaRS Centre
Toronto, Ontario M5G 1L7 Canada
T: [REDACTED]
F: [REDACTED]
E: [REDACTED]

With a copy to the Principal Investigator:

Dr. Phedias Diamandis
Scientist, Princess Margaret Cancer Centre
Neuropathologist, University Health Network
PMCRT, 14th floor
101 College Street
Toronto, ON, M5G 1L7 Canada
T: [REDACTED]
E: [REDACTED]

If to the Sponsor:

Fabio Chianelli
President
PharmaTher Inc.
82 Richmond Street East
Toronto, ON M5C 1P1
T. [REDACTED]
E. fabioc@pharmather.com

Any such notice shall be deemed to have been given and received when actually received. Either Party may change its address for service from time to time by notice given in accordance with the foregoing.

ARTICLE 12 – DISPUTE RESOLUTION

- 12.1 Best Efforts.** The Parties agree to use reasonable best efforts to resolve amicably among themselves any dispute arising out of this Agreement.
- 12.2 Referral for Resolution.** If the Parties are unable to resolve the dispute under Section 12.1, the dispute shall be referred to the Vice President, Research of UHN (or designate) and President of the Sponsor (or designate) for their discussion and resolution. The Parties may agree to mediation of the dispute.
- 12.3 Arbitration.** Any dispute which cannot be settled amicably between the Parties as provided in Sections 12.1 and 12.2 shall be submitted to arbitration, by an arbitrator to be mutually agreed upon by the parties, in accordance with the provisions of the *Arbitration Act, 1991*, S.O. 1991, c.17, as amended from time to time. The arbitration will take place in the City of Toronto.

ARTICLE 13 – GENERAL

- 13.1 Entire Agreement.** This Agreement, together with the Schedules, constitutes the entire Agreement between the Parties with respect to its subject matter and supersedes all prior agreements, negotiations and discussions (whether written or oral). There are no conditions, agreements, representations, warranties or other provisions relating to the subject matter of this Agreement except as expressly provided for in the Agreement.
- 13.2 Assignment.** This Agreement shall not be assignable by any Party without the prior written consent of the other Party. Any and all assignments not made in accordance with this section shall be void.
- 13.3 No Joint Venture.** Each Party is and will remain at all times independent of each other. The Parties are not and shall not be considered to be joint venturers, partners or agents of each other and neither of them shall have the power to bind or obligate the other except as set forth in this Agreement. The Parties mutually covenant and agree that neither shall they, in any way, incur any contractual or other obligation in the name of the other, nor shall they have liability for any debts incurred by the other. No representation will be made or acts taken by any of the Parties which could establish any apparent relationship of agency, joint venture, partnership or employment.
- 13.4 Waiver.** No amendment, supplement or waiver of any provision of this Agreement shall be binding on any Party unless consented to in writing by such Party. No waiver of any provision of this Agreement shall constitute a waiver of any other provision, nor shall any waiver constitute a continuing waiver unless otherwise expressly provided. Further, no failure or delay by any Party in exercising any right or remedy shall operate as a waiver thereof, nor shall any single or partial exercise or waiver of any right or remedy preclude its further exercise or the exercise of any other right or remedy.
- 13.5 Governing Law.** This Agreement shall be governed by the laws of the Province of Ontario and the federal laws of Canada applicable therein, and shall be treated as an Ontario contract. Subject to Section 12.3, each Party irrevocably and unconditionally submits to the non-exclusive jurisdiction the courts of Ontario and all courts competent to hear appeals therefrom in connection with any matters arising under this Agreement.
- 13.6 General Assurances.** Each of the Parties shall execute such additional agreements and documents, and take such further steps as may be reasonably requested by the other Party in order to give effect to this Agreement.

- 13.7 Severability of Provisions.** Each provision of this Agreement is separate, severable and distinct. In the event that any provisions of this Agreement are determined to be invalid or unenforceable by a court of competent jurisdiction in any particular jurisdiction, the remainder of the Agreement shall remain in full force and effect in said jurisdiction, and such determination shall not affect the validity or enforceability of said invalidated provision or the Agreement *per se* in any other jurisdiction. The Parties shall in good faith negotiate a substitute clause for any provision declared invalid or unenforceable, which shall most nearly approximate the intent of the Parties in entering this Agreement.
- 13.8 Force Majeure.** In the event that any one of the Parties is prevented from fulfilling any of its obligations herein by acts of God, war, terrorism, strikes, riots, storms, fires, governmental orders or restrictions or any other cause beyond its control (each, a "Force Majeure Event"), the obligations of a Party, other than an obligation to make payments under this Agreement, shall be suspended during the Force Majeure Event. The Parties will have the right to terminate this Agreement in the event that the other Party is unable to fulfill its obligations herein for a period of at least three (3) months due to a Force Majeure Event.
- 13.9 Counterparts.** This Agreement may be executed in counterparts each of which shall be deemed an original but all of which together shall constitute one and the same instrument.

The Sponsor and UHN have executed this Agreement so as to be effective as of the Effective Date.	
PharmaTher Inc. By: " <u>Fabio Chianelli</u> " Name: Fabio Chianelli Title: President Date: June 1, 2020	UNIVERSITY HEALTH NETWORK By: " <u>Bradly G. Wouters</u> " Name: Bradly G. Wouters, PhD Title: Executive VP, Science & Research Date: Jun 5, 2020
ACKNOWLEDGMENT I, the Principal Investigator, have read the provisions of this Agreement and will use my best efforts to direct the Research Program in my capacity as an employee/staff member of UHN and as directed by UHN. Principal Investigator by: " <u>Dr. Phedias Diamandis</u> " Dr. Phedias Diamandis Date: June 1, 2020	

SCHEDULE A
(Research Program & Activities)

PharmaTher Inc. wishes to build a proprietary drug repurposing system (DRS) that combines a suite of, but not limited to, drug targeting interactions, drug binding, drug-disease similarities and structural comparisons tools with big data, machine learning and artificial intelligence to aid in arriving at new drug use predictions.

The research will include:

1. Test and prioritize publicly-available open source drug repurposing tools (DRT) to incorporate into the DRS.
2. Update DRTs and databases, refine machine learning algorithms, backtest predictions.
3. Integrate DRTs and newly created tools to the DRS.
4. Complete development of the DRS for commercial and research use.
5. Other tasks as they arise, such as reviewing new DRTs, and maintenance, refinements, and improvements of DRS.

Deliverables:

Expected Costs of Deliverables:

Deliverables 1-2: \$45,000 (Months 1-3+)

Deliverable 3-4: \$45,000 (Months 3-6)

Deliverable 3-4: \$25,000 (Months 6-10)

Deliverable 6-8: \$25,000 (Months 10+)

1. Generate list of DRTs available in the literature (Months 1).
2. Regular meetings to review literature, present and demonstrate functionality and features of available DRT (bimonthly - Months 1-12).
3. Upload and maintain DRTs (Months 2-12).
4. Develop and maintain DRS (Months 2-12).
5. Retrieve and incorporate publicly available neurological databases into DRT and compare and contrast pros/cons of each tool (Months 3-12).

6. Use examples of known targets and existing therapies as “ground truth” results to develop and test different machine learning algorithms at predicting relevant targets (Months 4-12).
7. Integrate DRTs and machine learning algorithms into developed DRS (Months 5-12).
8. Complete development of the DRS for commercial and research use (Month 12).
9. Maintain, refine, and improve DRS with new knowledge and datasets (Months 4 - Ongoing).

SCHEDULE B
(Budget)

Budget (12 months, Total): \$100,000 (Cost of Research) + \$40,000 (Overhead)

Personnel: \$119,000

Description: The amount will cover the salary (\$85,000) and overhead (\$34,000) costs of a research associate to carry out this work (software development, bioinformatics, machine learning, artificial intelligence).

Technology: \$21,000

Description: This amount will cover the equipment, software, third party hosting, server and other hardware associated costs with this project (\$15,000). An additional \$6,000 of overhead costs are included.

Distribution of Funds:

\$25,000 is requested up front to help purchase required hardware, software, third party hosting, server, other hardware and secure recruitment of personnel. Once a mutually approved research personnel is recruited, an additional \$45,000 will be secured for their salary support. The remaining funds (\$70,000) will be provided at the 6 month mark of the recruitment of personnel to continue providing salary to recruited personnel/hardware maintenance/upgrades.

SCHEDULE C
(Background Intellectual Property)

UHN Background Intellectual Property

Sponsor Background Intellectual Property