# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6058173

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
GEORGIA STATE UNIVERSITY RESEARCH FOUNDATION	11/09/2019

#### **RECEIVING PARTY DATA**

Name:	CROWPIERCE TECHNOLOGIES, LLC
Street Address:	112 ROSEBURY DRIVE
City:	CANTON
State/Country:	GEORGIA
Postal Code:	30115

#### **PROPERTY NUMBERS Total: 16**

Property Type	Number
Patent Number:	7531344
Patent Number:	7531343
Patent Number:	8323942
Patent Number:	9605241
Patent Number:	7943549
Patent Number:	8389441
Patent Number:	9462813
Patent Number:	9993005
Patent Number:	10004237
Patent Number:	10244765
Patent Number:	10300093
Application Number:	16475878
Application Number:	15502698
Application Number:	16307333
Application Number:	16347427
Application Number:	16460349

#### **CORRESPONDENCE DATA**

**Fax Number:** (404)645-7707

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

**Phone:** 4046457700

Email: wballew@mcciplaw.com

Correspondent Name: MEUNIER CARLIN & CURFMAN LLC

**Address Line 1:** 999 PEACHTREE STREET, NE

Address Line 2: SUITE 1300

Address Line 4: ATLANTA, GEORGIA 30309

ATTORNEY DOCKET NUMBER:	11183-001GEN
NAME OF SUBMITTER:	WENDY Y. BALLEW
SIGNATURE:	/Wendy Y. Ballew/
DATE SIGNED:	04/13/2020

## **Total Attachments: 12**

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# INTELLECTUAL PROPERTY ASSIGNMENT AGREEMENT



THIS INTELLECTUAL PROPERTY ASSIGNMENT AGREEMENT (this "Agreement") is entered into as of October 7, 2019 (the "Effective Date") between and among Georgia State University Research Foundation, having an address at 100 Auburn Avenue, Suite 532, Atlanta, GA 30303 ("GSURF"), Crowpierce Technologies, LLC, an LLC operating under the laws of the State of Georgia, having an address at 112 Rosebury Drive, Canton, GA 30115, ("Crowpierce") and the Inventors, as defined below.

MPE 1/1/19

#### RECITALS

WHEREAS, GSURF has determined that it would be appropriate and desirable to assign certain inventions, including the intellectual property rights therein, that it currently owns;

WHEREAS, Crowpierce wishes to acquire the inventions, including the intellectual property rights therein;

WHEREAS, the Inventors have also determined that it would be appropriate and desirable for the inventions including the intellectual property rights therein, to be assigned to Crowpierce;

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants and agreements set forth below, and other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, the parties hereby agree as follows:

#### AGREEMENT

#### 1. DEFINITIONS

- 1.1 "Assigned Patents" means: (a) all Patents listed in Exhibit A; (b) all inventions claimed or described in such Patents; (c) all divisions, renewals, reissues, continuations, extensions, and continuations-in-part of the foregoing Patents, (d) any Patents in the United States and anywhere else in the world and Patent applications that have been or may be granted or filed with respect to those inventions, including without limitation all foreign Patents that may claim priority based on and correspond to the Patents listed in Exhibit A; and (e) subject to the grant in Section 2.6, all rights with respect to such Patents.
- 1.2 "<u>Crowpierce</u>" means Crowpierce, employees, officers and affiliates as of the Effective Date, and each other person that becomes an employee, officer or affiliate of Crowpierce after the Effective Date.
- 1.3 "Intellectual Property" means all rights in Copyrights, Patents, Trademarks Technology, Know-How and any other proprietary rights relating to intangible property anywhere in the world, and all registrations and applications related to any of the foregoing and analogous rights thereto anywhere in the world.

- 1.4 "Inventors" means the named inventors listed on one or more of the Assigned Patents, Christopher T. Cornelison, Ph.D., Sidney A. Crow, Ph.D., Gene K Drago, Ph.D., Kyle Gabriel, Ph. D., Sangeeta Ganguly, Ph.D., George E. Pierce, Ph.D., Trudy Ann Tucker, Ph.D., and Amber Ward Keller.
- 1.5 "Patents" means: (a) patents and patent applications, worldwide, including all divisions, continuations, continuing prosecution applications, continuations in part, reissues, renewals, reexaminations, and extensions thereof and any counterparts worldwide claiming priority therefrom; utility models, design patents, patents of importation/confirmation, and certificates of invention and like statutory rights.
- 1.6 "Registered Intellectual Property" means Intellectual Property that is the subject of an application, certificate, filing, registration or other document issued by, filed with, or recorded by any governmental or quasi-governmental agency or non-governmental registrar (whether provisional, supplemental, or otherwise), anywhere in the world.
- 1.7 "Assigned <u>Technology</u>" means any and all technical information, specifications, drawings, records, documentation, works of authorship or other creative works, ideas, knowledge, know-how, trade secrets, invention disclosures or other data (but does not include Trademarks or Patents).

## 2. ASSIGNMENT AND TRANSFER OF INTELLECTUAL PROPERTY

- 2.1 <u>Assigned Intellectual Property</u>. In accordance with this Agreement, and subject to grant in Section 2.6, GSURF hereby sells, assigns, conveys, transfers and agrees to deliver to Crowpierce and Crowpierce hereby acquires from GSURF all right, title and interest in the United States and throughout the world of GSURF in and to the following (collectively, the "Assigned Intellectual Property"):
- (a) all Assigned Patents listed in Exhibit A, and Assigned Technology, including without limitation, the Intellectual Property described in the Assigned Patents listed in Exhibit A;
- (b) subject to the grant in Section 2.6, the exclusive right to grant licenses and rights under and with respect to any of the Intellectual Property referenced in Section 2.1(a), and to sue for any infringement occurring before or after the Effective Date as well as all statutory, contractual and other claims, demands, and causes of action for royalties, fees, or other income from, or infringement, misappropriation or violation of, any of the foregoing, and all of the proceeds from the foregoing that are accrued and unpaid as of, and/or accruing after, the Effective; and
- (c) The exclusive right to apply for and obtain statutory rights and registrations with respect to any Intellectual Property referenced in Section 2.1(a), in the United States and anywhere else in the world.
- 2.2. <u>Inventor and Crowpierce Obligations</u>, <u>Acknowledgements</u>, <u>Representations and Indemnification</u>.

- a. Each of the Inventors hereby expressly acknowledges GSURF's authority to make this assignment to Crowpierce, and waives the right to any objection to make this assignment.
- b. Each Inventor hereby relinquishes any rights he or she may have under the Georgia State University Intellectual Property Policy to any share of a revenue paid to GSURF hereunder.
- c. The Inventors agree not to conduct any further research related to the Assigned Patents or Assigned Intellectual Property on the premises of GSURF without the express written consent of the Georgia State University Vice President for Research and Economic Development, and Georgia State University's University Attorney.
- d. With the exception of the entities listed on Exhibit B, the Inventor who is a named Inventor in the respective patent family represents that the inventions embodied in the relevant Assigned Patent(s) was (were) developed without the use of any external funds or other support from a government agency or any research sponsor.
- e. Each Inventor represents that he or she is not aware of any individuals other than those listed as Contributors on the GSU Intellectual Property Disclosure Forms submitted for the Assigned Patents who contributed to the development of the inventions embodied in the Assigned Patents. The executed Intellectual Property Disclosure Forms in possession of GSURF have been provided to Crowpierce.
- f. Crowpierce and each Inventor hereby expressly acknowledge that the Assigned Patents and Assigned Intellectual Property are assigned AS IS with no warranty of any kind express or implied.
- g. Crowpierce and each Inventor assume all legal obligations, including under U.S. patent law, relating to the filing and prosecution of the Assigned Patents and Assigned Intellectual Property Rights.
- h. Crowpierce and each Inventor will indemnify and hold harmless, GSURF, Georgia State University, the Regents of the University System of Georgia and their employees against any claim of any kind arising out of or related to its exercise of the rights granted under this Agreement. Notwithstanding the foregoing, obligations to indemnify and defend GSURF shall not extend to actions brought as a result of (i) GSURF's lack of authority to make the assignment referred to in Section 2.1 or (ii) actions brought by third parties as a result of failure, on the part of GSURF, GSU or the Board of Regents of the University System of Georgia and/or their employees to abide by or fulfill any contractual obligations GSURF may have or may have had to those third parties (or successors in interest to those third parties) listed in Exhibit B with regard to the Assigned Patents. Subsection (ii) of the previous sentence shall not apply for obligations to third parties that are or were within the exclusive control of the respective Inventor of a given Assigned Patent. For the avoidance of doubt, Crowpierce and each Inventor will not indemnify GSURF, Georgia State University, the Regents of the University System of Georgia and their employees for actions brought by third parties as a result of failure, on the part of GSURF, GSU or the Board of Regents of the University System of Georgia and/or their

employees to abide by or fulfill any contractual obligations which any of those entities have or have had to third parties (or successors in interest to those third parties) which are not (or were not) in the exclusive control of the respective Inventor of a given Assigned Patent.

- 2.3 Mandatory Laws. If and to the extent that, as a matter of law in any jurisdiction, ownership, title, or any rights or interest in or to any of the Assigned Intellectual Property cannot be assigned as provided in Section 2.1, (i) GSURF agrees, subject to the grant in Section 2.6, to assign and transfer, and hereby assigns and transfers to Crowpierce all rights (including, without limitation, all economic and commercialization rights) that can be assigned pursuant to Section 2.1 (Assigned Intellectual Property) to the fullest extent permissible; and (ii) subject to the grant in Section 2.6, GSURF hereby grants Crowpierce an unlimited exclusive, irrevocable, worldwide, perpetual, royalty-free license to use, exploit and commercialize in any manner now known or in the future discovered and for whatever purpose, any rights to Assigned Intellectual Property that cannot be assigned as contemplated by Section 2.1 (Assigned Intellectual Property).
- 2.4 <u>Supplemental Document Deliveries</u>. GSURF agrees to provide to Crowpierce documents as may be necessary to affect the transfer the Assigned Intellectual Property.
- 2.5 Previous expenditures made by GSURF for patent protection of the Assigned Patents. GSURF has made certain expenditures directly related to the patent protection of the Assigned Patents. Crowpierce agrees that, in full consideration for this assignment, over the course of the next 6 years, it will reimburse GSURF an amount not to exceed One Hundred Thousand USD (\$100,000.00) of those expenditures for which GSURF has provided written documentation to Crowpierce by the date set forth in Section 3 below. The first such payment shall be made ten (10) business days after the effective date of this Agreement, and the subsequent installments of reimbursement payments will be made annually on the anniversary of the Effective Date of this Agreement, as follows: The first payment shall be in the amount of Ten Thousand USD ((\$10,000), and the remaining payments shall be made in five equal annual installments of Eighteen Thousand USD (\$18,000.00), to GSURF or its designee. Crowpierce may, in its sole discretion, elect to pre-pay the remaining balance of the reimbursement of documented patent protection expenses. The Parties acknowledge that the Assignment referred to in Section 2.1 shall occur on the Effective Date and is not contingent upon the reimbursement of these expenditures, provided that this Assignment may be revoked at GSURF's discretion if the reimbursement of the expenditures described in this Section 2.5 are not made as recited in this Section 2.5 Payment shall be made in accordance with Section 4.4 below.
- 2.6 Crowpierce and the Inventors irrevocably grant GSURF for itself, for Georgia State University, and for other non-profit and governmental institutions the right to practice the inventions and Assigned Patents for non-commercial research, educational and patient care purposes, including the right to grant licenses for the uses of the inventions and Assigned Patents limited to non-commercial research, educational and patient care purposes.
- TECHNOLOGY ACCESS AND KNOWLEDGE TRANSFER.

GSURF shall instruct its patent counsel to provide to Crowpierce or its designee all tangible embodiments of the Assigned Intellectual Property and all records and documentation relating thereto, including but not limited to (i) all files, records, notes and correspondence with respect to the prosecution, registration and maintenance of any Registered Intellectual Property at Crowpierce's expense. The Parties agree that GSURF has provided to Crowpierce copies of issued patents and pending applications listed in Exhibit A. Any additional information or documentation that Crowpierce may request shall be provided at Crowpierce's expense.

#### 4. MISCELLANEOUS

- 4.1 <u>Governing Law</u>. The laws of the State of Georgia (without reference to its principles of conflicts of law) govern the construction, interpretation and other matters arising out of or in connection with this Agreement and its exhibits and schedules (whether arising in contract, tort, equity or otherwise).
- 4.2 <u>Jurisdiction</u>. If any Dispute arises out of or in connection with this Agreement, except as expressly contemplated by another provision of this Agreement, the parties irrevocably (a) consent and submit to the exclusive jurisdiction of federal and state courts located in Georgia and (b) waive any objection to that choice of forum based on venue or to the effect that the forum is not convenient.
- 4.3 Notices. Each party giving any notice required or permitted under this Agreement will give the notice in writing and use one of the following methods of delivery to the party to be notified, at the address set forth below or another address of which the sending party has been notified in accordance with this Section 4.3 (a) personal delivery; (b) commercial overnight courier with a reasonable method of confirming delivery; or (c) pre-paid, United States of America certified or registered mail, return receipt requested. Notice to a party is effective for purposes of this Agreement only if given as provided in this Section 3 and shall be deemed given on the date that the intended addressee actually receives the notice.

#### If to GSURF:

Georgia State University 100 Auburn Avenue, Suite 315 Atlanta GA 30303 Attention: University Attorney

With a copy to:

Georgia State University Research Foundation 100 Auburn Avenue, Suite 532 Atlanta GA 30303 Attention: Chair

If to Crowpierce Technologies, LLC:

112 Rosebury Drive, Canton, GA 30115 Attention: George Pierce, Ph.D.:

With a copy to:

Attention: Sidney A Crow, Ph.D.

2033 Cliff Creek Court Smyrna, GA 30080

If to Sangeeta Ganguly-Mink, Ph.D.:

7025 North Mendota Ave. Chicago, IL 60646

If to Gene K. Drago, Ph. D.:

145 Old Post Office Loop Bainbridge, GA 39819

If to Christopher T. Cornelison, Ph.D.:

1150 Briar Vista Terrace NE Atlanta, GA 30324

If to Kyle Gabriel, Ph.D.:

3350 George Busbee Parkway NW #306 Kennesaw, Georgia 30144

If to Trudy Ann Marie Tucker, Ph.D.:

100 First St, Apt 433 Rockville, MD 20851

If to Amber Ward Keller:

5971 Haddon Place SE Mableton, GA 30126

4.4 <u>Payments</u>. Payments in USD referred to in Section 2.5 shall be made by wire transfer as follows:

Account Holder: Georgia State University Research Foundation

Bank: Bank of America

Bank Address: 600 Peachtree St, Atlanta GA 30308

Account Number: 003261308458

ABA number: 061000052

If GSURF wishes to change the payment details, it shall provide notice to Crowpierce in writing in accordance with Section 4.3 at least ten (10) days prior to the anniversary of the Effective Date of this Agreement.

- 4.5 <u>Binding Effect and Assignment</u>. This Agreement binds and benefits the parties and their respective successors and assigns, neither party may assign any of its rights or delegate any of its obligations under this Agreement without the written consent of the other party which consent may be withheld in its sole and absolute discretion and any assignment or attempted assignment in violation of the foregoing will be null and void.
- 4.6 Severability. If any provision of this Agreement is determined to be invalid, illegal or unenforceable, the remaining provisions of this Agreement will remain in full force, if the essential terms and conditions of this Agreement for each party remain valid, binding and enforceable. Furthermore, with regard to the representations and warranties in Subsection 2.2 above, if there is a failure on the part of Crowpierce or any of the Inventors with regard to a given Assigned Patent, then the ramifications of that failure shall apply only to the relevant Assigned Patent. The assignment of the other Assigned Patents and all other terms and conditions of this Agreement shall remain in full force and effect.
- 4.7 Entire Agreement. This Agreement, and each of the exhibits and schedules appended hereto and thereto, constitutes the final agreement between the parties, and is the complete and exclusive statement of the parties' agreement on the matters contained herein and therein. All prior and contemporaneous negotiations and agreements between the parties with respect to the matters contained in this Agreement are superseded by this Agreement.
- 4.8 <u>Counterparts</u>. The parties may execute this Agreement in multiple counterparts, each of which constitutes an original as against the party that signed it, and all of which together constitute one agreement. The signatures of both parties need not appear on the same counterpart. The delivery of signed counterparts by facsimile or email transmission that includes a copy of the sending party's signature is as effective as signing and delivering the counterpart in person.
- 4.9 <u>Expenses</u>. Except as otherwise provided in this Agreement, or any other agreement between the parties contemplated hereby, all costs, fees and expenses of either party in connection with the transactions contemplated by this Agreement will be paid by the party that incurs such costs and expenses.

- 4.10 <u>Amendment</u>. The parties may amend this Agreement only by a written agreement that is signed by each party to be bound by the amendment and that identifies itself as an amendment to this Agreement.
- 4.11 <u>Authority</u>. Each of the parties hereto represents to the other that: (a) it has the requisite power and authority to execute, deliver and perform this Agreement, (b) the execution, delivery and performance of this Agreement has been duly authorized (c) it has duly and validly executed and delivered this Agreement, and (d) this Agreement is a legal, valid and binding obligation, enforceable accordance with its terms.
- 4.12 <u>Construction of Agreement</u>. Any reference in this Agreement to the singular includes the plural where appropriate. Any reference in this Agreement to the masculine, feminine or neuter gender includes the other genders where appropriate.

IN WITNESS WHEREOF, each of the parties has caused this Agreement to be executed on its behalf by a duly authorized officer on the day and year first above written.

Michael Eriksen, Ph.D. GSURF

By:

Title: Lhair

George Pierce, Ph.D.

Crowpierce Technologies, LLC

Title: Chief Operating Officer

Date: November 1, 2019

Chris Cornalison, Ph.D. Christopher T. Comelison, Ph. D.

Date: 10/31/2019

Sidney A. Crow, Ph.D Date: 10-25-2019	
Geffe K. Drago, Ph.D Date: 252 P.D	
Myle Malice Kyle Gabriel, Ph.D.  Date: 10/21/2019	
Sangeeta Ganguly Mink, Ph.D.  Date: 10/24/2015	
	A.
George E. Piorce, Ph.D. Date: 10/2-5/19	*
George E. Pjorce, Ph.D.	

# EXHIBIT A PATENT FAMILIES

### Family 1-Induction and Stabilization

USP 7,531,344 (Pierce, Drago and Ganguly)

### Family 2-Induction and Stabilization

USP 7,531,343 (Pierce, Drago and Ganguly)

USP 8,323,942 (Pierce, Drago and Ganguly)

USP 9,605,241 (Pierce, Drago and Ganguly)

## Family 3-Delayed Ripening

USP 7,943,549 (Pierce, Drago and Ganguly)

USP 8,389,441 (Pierce, Drago and Ganguly)

USP 9,462,813 (Pierce, Drago and Ganguly)

## Family 4 -Chill Injury

USP 9,993,005 (Pierce)

#### Family 5-Fungal Control

**USP 10,004,237** (Pierce and Crow)

**USP 10,244,765** (Pierce and Crow)

## Family 6-Fungal Infections

USP 10,300,093 (Pierce, Crow, Tucker and Cornelison)

## Family 7-Low-odor Antimicrobial

US Application No. 16/475878 (Pierce, Crow and Keller)

# Family 8-Volatiles

US Pub. Appl. 2017/0245496 (Gabriel and Cornelison)

Family 9-Seed Germination

US Pub. Appl. 2019/0133137 (Pierce and Crow)

Family 10-Endotoxin-free Asparaginase

US Pub. Appl. 2019/0275121 (Pierce and Crow)

EP Pub. Appl. EP3535386

# Exhibit B

- 1. Cytec Industries
- 2. Georgia Department of Agriculture
- 3. Novozymes
- 4. Georgia Research Alliance
- 5. De Laval
- 6. Cooper-Vision
- 7. Bat Conservation International-Fungal Volatiles Control
- 8. Applied & Environmental Microbiology Foundation

PATENT REEL: 052379 FRAME: 0449

**RECORDED: 04/13/2020**