# 506693583 06/02/2021 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT6740401

| SUBMISSION TYPE:        |              | NEW ASSIGNMENT  |                |  |
|-------------------------|--------------|---|----------------|--|
| NATURE OF CONVEYANCE:   |              | INVENTION OWNERSHIP AGREEMENT AND CONSENT JUDGEMENT         |                |  |
| CONVEYING PARTY         | ′ DATA       |   |                |  |
|                         |              | Name  | Execution Date |  |
| PHIO PHARMACEUT         | FICALS CORP. |   | 05/06/2021     |  |
|                         |              |   |                |  |
| RECEIVING PARTY         |              |   |                |  |
| Name:                   | UNIVERSIT    | UNIVERSITY OF MASSACHUSETTS                                 |                |  |
| Street Address:         | ONE BEAC     | ONE BEACON STREET   |                |  |
| Internal Address:       | 31ST FLOC    | 31ST FLOOR  |                |  |
| City:                   | BOSTON       | BOSTON  |                |  |
| State/Country:          | MASSACHU     | MASSACHUSETTS   |                |  |
| Postal Code:            | 02108        |   |                |  |
|                         |              |   |                |  |
| PROPERTY NUMBE          | RS Total: 4  |   | _              |  |
| Property Type           |              | Number  |                |  |
| Application Number:     |              | 39423   |                |  |
| Application Number: 1   |              | 91120   |                |  |
| Application Number: 169 |              | 27543   |                |  |
| _ · ·                   |              | 73701   |                |  |
|                         |              |   | J              |  |
| CORRESPONDENC           | E DATA       |   |                |  |
| Fax Number:             | (857         | )300-4001   |                |  |
| -                       |              | e-mail address first; if that is un                         |                |  |
| Phone:                  | •            | t <b>hat is unsuccessful, it will be se</b> i<br>) 300-4000 |                |  |
|                         |              | slie.roberts@lathropgpm.com, internalip@lathropgage.com     |                |  |
|                         |              | HROP GPM LLP  |                |  |
|                         |              | TATE STREET   |                |  |
|                         |              | FLOOR   |                |  |
| Address Line 4:         | BOS          | BOSTON, MASSACHUSETTS 02109                                 |                |  |
| ATTORNEY DOCKET NUMBER: |              | UM9-209 FAMILY  |                |  |
| NAME OF SUBMITTER:      |              | JAMES H. VELEMA   |                |  |
| SIGNATURE:              |              | /James H. Velema/   |                |  |
| DATE SIGNED:            |              | 06/02/2021  |                |  |
| Fotal Attachments: 7    |              | 1   |                |  |
|                         |              |   |                |  |

| source=580035- UM9-209 - Invention Ownership Agreement and Consent Judgement#page1.tif |
|--|
| source=580035- UM9-209 - Invention Ownership Agreement and Consent Judgement#page2.tif |
| source=580035- UM9-209 - Invention Ownership Agreement and Consent Judgement#page3.tif |
| source=580035- UM9-209 - Invention Ownership Agreement and Consent Judgement#page4.tif |
| source=580035- UM9-209 - Invention Ownership Agreement and Consent Judgement#page5.tif |
| source=580035- UM9-209 - Invention Ownership Agreement and Consent Judgement#page6.tif |
| source=580035- UM9-209 - Invention Ownership Agreement and Consent Judgement#page7.tif |
|  |

#### **INVENTION OWNERSHIP AGREEMENT**

This Invention Ownership Agreement ("**Agreement**") between **Phio Pharmaceuticals Corp.** f/k/a RXi Pharmaceuticals Corp. ("Phio"), a Delaware corporation having its principal place of business at 257 Simarano Drive, Suite 101, Marlborough, Massachusetts 01752; and **University of Massachusetts** ("UMass"), having its principal place of business at One Beacon Street, 31<sup>st</sup> Floor Boston, Massachusetts 02108 is effective as of May 6, 2021 ("**Effective Date**"). UMass and Phio hereby agree as follows:

## I. Definitions

A. "Application" means U.S. Patent Application No. 15/089,423 and any application from which it claims priority.

B. "Inventions" means any and all inventions and designs by Anastasia Khvorova, Ph.D. ("Dr. Khvorova") by herself or with others disclosed publicly for the first time in or within the scope of: (a) the Application and any patents that issue or have issued from the Application; (b) any and all refiling, divisions, continuations and continuations-in-part of the Application and any patents that issue from such refiling, divisions, continuations and continuations-in-part; (c) any and all reissue and reexamination of any patent within the scope of (a)-(b) of this definition; (d) any foreign application for a patent upon an invention disclosed in any patent or patent application within the scope of (a)-(c) of this definition, any and all refiling, divisions, and continuations of such foreign-filed applications, any foreign patent which issues from the foregoing foreign-filed applications, refiling, divisions and continuations, and any and all extensions of and additions to such foreign patents; (e) all claims, causes of action and damages for patent infringement, misappropriation of trade secrets, breach of confidentiality, or violation of any other intellectual property rights, if any, relating to any application or patent within the scope of (a)-(d) of this definition.

C. "Phio Filing" means that patent assignment document dated July 5, 2017, purportedly between Dr. Khvorova and Phio and recorded on Reel: 042906 / Frame: 0858-0860.

D. "UMass Assignment" means the patent assignment effective April 1, 2016, by and among UMass and Dr. Khvorova and the other inventors party thereto and recorded on Reel: 039335 / Frame: 0300-0305.

II. Invention Ownership

A. Phio agrees that UMass is the sole and exclusive owner of the Application and the Inventions. Phio agrees that it does not own, co-own, or have any other rights in the Application or the Inventions.

B. Phio rescinds, abrogates, terminates, and withdraws the Phio Filing and acknowledges and agrees that it is null and void, does not, and has never had any legal effect.

C. Notwithstanding anything to the contrary, if and to the extent Phio ever had or could ever have had any right, title or interest in and to the Inventions, it hereby quitclaims, assigns, and transfers to UMass and UMass' successors, assigns and legal representatives, Phio's

1

entire right, title and interest for the United States and all foreign countries, in the Inventions and, for avoidance of doubt, in and to any and all rights identified in the Phio Filing, namely, (1) all inventions (as that word is used in the Phio Filing) and designs which are disclosed in the Application and in and to all corresponding non-provisional, divisional, continuing, substitute, renewal, reissue and all other applications for Letters Patent, utility models, industrial designs or similar intellectual property rights which have been or shall be filed in the United States, internationally, and in any foreign country, including but not limited to China, Japan and Korea, on inventions; and in and to all original and reissued patents which have been or shall be issued in the United States or any other jurisdiction on the inventions, including the right to apply for patent rights in each foreign country and all rights to priority, including the right to claim priority for China, Japan and Korea, as well as the right to sue in its own name and recover damages for past infringement of any United States Letters Patent and foreign patents; and (2) the right to apply for and receive Letters Patent and utility model and industrial design registrations for the inventions in its own name and to require Dr. Khvorova to undertake activities related to the inventions and applications that are the subject of the Phio Filing, including executing applications and other papers and communicating with Phio.

D. Phio acknowledges and agrees that pursuant to the UMass Assignments, UMass is the true and correct assignee of all right, title and interest in and to the Inventions and, specifically and for avoidance of doubt, of all Inventions identified in the UMass Assignments, namely, the full and exclusive right, title and interest, throughout the world, in, to and under the following:

- a) the Inventions as fully set forth and described in the specifications prepared, and executed by Dr. Khvorova preparatory to obtaining Letters Patent of the United States therefor;
- b) the Application;
- c) any and all re-filings, divisions, continuations and continuations-in-part of the Application;
- d) any and all Letters Patent of the United States of America which may issue from said Application, re-filings, divisions, continuations and continuations-in-part;
- e) any and all reissues and reexaminations of said Letters Patent of the United States of America;
- f) any and all applications for Letters Patent upon said Inventions which may hereafter be filed in any and all countries foreign to the United States of America;
- g) any and all re-filings, divisions and continuations of said foreign-filed applications;
- h) all claims, causes of action and damages for past infringement, if any, of said Application;
- i) any and all Letters Patent of countries foreign to the United States of America which may issue from the said foreign-filed applications, re-filings, divisions and continuations; and

- j) any and all extensions of, and additions to, said Letters Patent of countries foreign to the United States of America.
- k) ALL of the above is held and enjoyed by UMass, for its own use and benefit, and for its successors, legal representatives and assigns, to the full end of the term for which said Letters Patent may be granted.

E. From and after the Effective Date, Phio shall not directly or indirectly challenge or call into question UMass's sole and exclusive ownership of the Inventions or solicit, encourage, or assist a third party to do so.

F. Phio shall make, execute, acknowledge and deliver, all such instruments and documents, and take all such action as may be reasonably necessary or may reasonably be requested by UMass to carry out the intent and purposes of this Agreement. UMass may record this Agreement, an abstract thereof, or any other document describing UMass' ownership in the Inventions with the relevant patent and trademark office.

-----Signature Page Follows------

IN WITNESS WHEREOF Phio has executed this Agreement by its duly authorized representative.

PHIO PHARMACEUTICALS, CORP.

By:

Name: Gerrit Dispersyn

Title: President & CEO

Date: 6-May-2021

ACKNOWLEDGED AND AGREED:

UNIVERSITY OF MASSACHUSETTS By: phatraberty Name: PARTHA CHAKRABARTI Title: EVC-Innovation & Business Dev. Date: May 11 202)

# JURAT

| State/Commonwealthof FLORIDA  |                      |  |  |  |  |
|---|----------------------|--|--|--|--|
| City County of Seminole   | )                    |  |  |  |  |
| On <u>05/06/2021</u> , before me, <u>Date</u><br>the foregoing instrument was subscribed ar                     | Notary Name          |  |  |  |  |
| Gerrit Dieter Dispersyn   |                      |  |  |  |  |
| Name of Affiant(s)  |                      |  |  |  |  |
| Personally known to me - OR -   |                      |  |  |  |  |
| Proved to me on the basis of the oath of  | OR                   |  |  |  |  |
| in the second |                      |  |  |  |  |
| Proved to me on the basis of satisfactory evid  | Type of ID Presented |  |  |  |  |
| TANICA L. MINNIS<br>Motary Public - State of Florida<br>Commission # GG948938<br>Notary Public Signature:       |                      |  |  |  |  |

 Notary Name:
 Tanica L. Minnis

 Notary Commission Number:
 GG948938

 Notary Commission Expires:
 01/20/2024

 Notarized online using audio-video communication

## DESCRIPTION OF ATTACHED DOCUMENT

Expires on January 20. 2024

Title or Type of Document: <u>INVENTION OWNERSHIP AGREEMENT 423</u>

Document Date: \_\_\_\_05/06/2021

Number of Pages (including notarial certificate): \_\_\_\_\_5

## COMMONWEALTH OF MASSACHUSETTS

SUFFOLK, ss.

 $\otimes i \not i$ 

# UNIVERSITY OF MASSACHUSETTS and ANASTASIA KHVOROVA,

Plaintiffs,

Υ.

PHIO PHARMACEUTICALS CORP. f/k/a RXI PHARMACEUTICALS CORPORATION,

Defendant.

## SUPERIOR COURT DEPARTMENT OF THE TRIAL COURT

NO. 19-2455-BLS1

BUSINESS LITIGATION SESSION

#### CONSENT JUDGMENT

UPON CONSIDERATION of the Plaintiffs' claim for declaratory judgment (Count I)

and Defendant's counterclaim for declaratory judgment (Count XII) it is hereby:

ORDERED, DECLARED AND ADJUDGED, as follows:

1. The University of Massachusetts ("UMass") is the sole and exclusive owner of

Professor Anastasia Khvorova's rights in:

(a) U.S. Patent Application Nos. 15/089,423, 15/089,319, 15/089,437, and 15/236,051;

(b) patent applications that are related to any of patent applications of (a);

(c) foreign counterparts to any patents applications of (a) or (b); and

(d) patents that issue from any of the patent applications of (a), (b), or (c).

2. Defendant Phio Pharmaceuticals Corp. f/k/a RXi Pharmaceuticals Corp. ("Phio")

does not have any ownership rights or interests in the intellectual property identified in

Paragraph 1 of this Judgment.

MIDOMPENTENTENED ON DOCKET MIDIE 231 WID PURCUANT TO THE PROVISIONS OF MASS. HI CIV. MOS(R) AND MOTIOE SEND TO PARTIES PURCUANT TO THE PRO-VISIONS OF MASS. R. CIV. P. 77(6) AS FOLLOWS

3. Phio shall take any and all actions reasonably necessary to abrogate and rescind any assignment(s), recordation(s) or notice(s) of ownership recorded in the U.S. PTO and referencing any of the intellectual property listed in Paragraph 1 of this Judgment, including assignments filed in the United States Patent and Trademark Office, and to confirm UMass' exclusive ownership of Professor Khvorova's rights in the intellectual property listed in Paragraph 1.

It is so ORDERED, ADJUDGED and DECREED.

Dated: 5/13/21

 $\chi^{(1)}_{i} \hat{\mathcal{S}}^{i}$ 

Associate Justice, Superior Court