502386228 06/17/2013

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|--------------------|----------------|
| Lyn Libertine | 11/05/2012 |
| Anastasia Khvorova | 11/15/2012 |
| William Salomon | 01/07/2013 |
| Joanne Kamens | 11/08/2012 |
| Dmitry Samarsky | 01/03/2013 |
| Tod M. Woolf | 12/12/2012 |
| James Cardia | 11/05/2012 |

RECEIVING PARTY DATA

| Name: | RXi Pharmaceuticals Corporation | |
|-----------------|---------------------------------|--|
| Street Address: | 1500 West Park Drive, Suite 210 | |
| City: | Westborough | |
| State/Country: | MASSACHUSETTS | |
| Postal Code: | 01581 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 13636748 |

CORRESPONDENCE DATA

Fax Number: 6176468646

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 617-646-8000

Email: patents_OonaJ@wolfgreenfield.com

Correspondent Name: Oona M. Johnstone
Address Line 1: 600 Atlantic Avenue
Address Line 2: Wolf Greenfield

Address Line 4: Boston, MASSACHUSETTS 02210

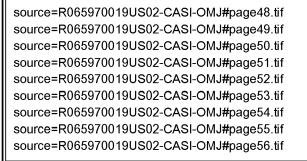
ATTORNEY DOCKET NUMBER: R0659.70019US02

P \$40.00 13636748

| NAME OF SUBMITTER: | Oona M. Johnstone |
|--------------------|---------------------|
| Signature: | /Oona M. Johnstone/ |
| Date: | 06/17/2013 |

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PATENT REEL: 030622 FRAME: 0616



PATENT REEL: 030622 FRAME: 0617

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned Assignor, hereby:

- Sell, assign and transfer to RXi Pharmaceuticals Corporation, a Delaware corporation 1. having a place of business at 1500 West Park Drive; Suite 210; Westborough, Massachusetts 01581, its successors, assigns and legal representatives, all hereinafter referred to as the Assignee, my entire right, title and interest for the United States and all foreign countries, in and to any and all inventions and designs which are disclosed in the application for United States Letters Patent filed in the United States Patent and Trademark Office on September 24, 2012 under No. 13/636,748, bearing Attorney Docket No. R0659.70019US02, and entitled RNA INTERFERENCE IN OCULAR INDICATIONS, and in and to the application and all corresponding provisional, 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 any of the 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;
- 2. Agree that the Assignee may apply for and receive Letters Patent and utility model and industrial design registrations for the inventions in its own name; and when requested, without charge to but at the expense of the Assignee, I agree to carry out in good faith the intent and purpose of this assignment, by executing all non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent, utility model and industrial design applications on any and all the inventions, by executing all rightful oaths, assignments, powers of attorney and other papers, by communicating to the Assignee all facts known to me relating to the inventions and the history thereof, and generally by doing everything reasonably possible which the Assignee shall consider desirable for aiding in securing and maintaining proper protection for the inventions and for vesting title to the inventions and all applications for patents and all patents on the inventions, in the Assignee;
- 3. Request the Director of the United States Patent and Trademark Office to issue the Letters Patent to the Assignee;
- 4. Authorize and request Wolf, Greenfield & Sacks, P.C. to supply any missing patent/application identification information or correct any errors in the patent/application identification information provided above, whether discovered prior to or after recordation; Covenant with the Assignee that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me; and
- 5. Appoint Assignee, through its designee, my attorney-in-fact to execute, in my name and on my behalf, any and all documents required to effectuate this Assignment, specifically including, but not limited to, those documents specified above and any necessary corrective assignments.

This instrument is executed under seal and signed under the pains and penalties of perjury under the laws of the United States of America.

Attorney Docket No. R0659.70019US02 2860003.1

Page 1 of 8

05 Nov 2012 Date

Inventor: Lyn Libertine

Address: 61 Nixon Road

Framingham, MA 01701

Citizenship: US

SEAL

My commission expires:

TAMARA McGRILLEN

Notary Public

COMMONWEALTH OF MASSACHUSETTS

My Commission Expires

September 22, 2017

| | | • |
|---------------------------|-----------------------------------|--|
| Date | Inventor: | Anastasia Khvorova |
| | Address: | 10 Rocklawn Road |
| | | Westborough, MA 01581 |
| | Citizenship: | US |
| | | |
| | | |
| | | |
| | | |
| COMMONWEALTH OF | MASSACHUSETTS | |
| COUNTY OF | | |
| On this | day of , | , before me, the undersigned notary public, |
| personally appeared | Anastasia Khvorova | , proved to me through satisfactory evidence of |
| identification, which wer | | - , provod to the amough dationatory ovidence of |
| : | | document in my presence and swore or affirmed |
| to me that the contents | of the document are truthful and | accurate to the best of (his) (her) knowledge |
| and belief and acknowle | edged to me that (he) (she) signe | ed it voluntarily for its stated purpose. |
| | | |
| CEAL | | |
| SEAL | | |
| | Notary Public | |
| My commission expi | ires: | |

Page 3 of 8

| Date | | Inventor: | William Salomon |
|--------------------------|-----------------------|---------------|---|
| | | Address: | 210 Mountain Street East |
| | | | Apt. 278 |
| | | | Worcester, Massachusetts 01606 |
| | . (| Citizenship: | US |
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| COMMONWEALTH OF | F MASSACHUSETTS | 3 | |
| COUNTY OF | : | | |
| On this | day of | , | , before me, the undersigned notary public, |
| personally appeared | William Salor | mon | , proved to me through satisfactory evidence of |
| identification, which we | | | , |
| | | | document in my presence and swore or affirmed |
| | | | accurate to the best of (his) (her) knowledge |
| and belief and acknowl | edged to me that (he) |) (she) signe | ed it voluntarily for its stated purpose. |
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| SEAL | Nistand | D. J. P. | |
| | Notary I | Public | |
| My commission exp | pires: | | |
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Page 4 of 8

| Date | Inventor: | Joanne Kamens |
|---------------------------|----------------------------------|---|
| | Address: | 21 Wessex Road |
| | | Newton, MA 02459 |
| | Citizenship: | US |
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| 0014140111415 ALTIL 05 | | |
| COMMONWEALTH OF | MASSACHUSETTS | |
| COUNTY OF | <u> </u> | |
| On this | day of , | , before me, the undersigned notary public, |
| personally appeared | Joanne Kamens | , proved to me through satisfactory evidence of |
| identification, which wer | e | |
| to be the person who sign | gned the preceding or attached | document in my presence and swore or affirmed |
| to me that the contents | of the document are truthful and | accurate to the best of (his) (her) knowledge |
| and belief and acknowle | edged to me that (he) (she) sign | ed it voluntarily for its stated purpose. |
| | | |
| SEAL | | |
| SEAL | Notary Public | |
| | • | |
| My commission exp | ires: | |

| Date | Invento | or: Dmitry Samarsky |
|--|-----------------|---|
| | Addres | ss: 15 Wayside Road |
| | | Westborough, MA 01581 |
| | Citizenshi | ip: US |
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| COMMONWEALTH OF | MASSACHUSETTS | |
| COUNTY OF | | |
| Ou Hala | da | |
| On this | day of , | , before me, the undersigned notary public, |
| personally appeared identification, which we | Dmitry Samarsky | , proved to me through satisfactory evidence of |
| · | | ed document in my presence and swore or affirmed |
| • | • • | and accurate to the best of (his) (her) knowledge |
| | | gned it voluntarily for its stated purpose. |
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| SEAL | | |
| | Notary Public | |
| My commission exp | pires: | |
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| 1 | | | |
|----------------------------|----------|--------------------------|---|
| Date | | Inventor: | Tod M. Woolf |
| Date | | | |
| | | Address: | 14 Babe Ruth Drive |
| | | | Sudbury, MA 01776-1942 |
| | | Citizenship: | US |
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| COMMONWEALTH OF N | 1ASSAC | HUSETTS | |
| COUNTY OF | | : | |
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| On this | lay of | , | , before me, the undersigned notary public, |
| personally appeared | 7 | Tod M. Woolf | , proved to me through satisfactory evidence of |
| identification, which were | | | |
| to be the person who sign | ed the p | receding or attached of | document in my presence and swore or affirmed |
| to me that the contents of | the doci | ument are truthful and | accurate to the best of (his) (her) knowledge |
| and belief and acknowled | ged to m | ne that (he) (she) signe | ed it voluntarily for its stated purpose. |
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| SEAL | | | |
| _ | | Notary Public | |
| My commission expire | es: | | |

| Date | Inventor: | James Cardia |
|--|------------------------------------|---|
| | Address: | 11 Bacon Street |
| | | Franklin, MA 02038 |
| ı | Citizenship: | US |
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| | | |
| COMMONWEALTH OF | MASSACHUSETTS | |
| COUNTY OF | | |
| On this | day of , | before me, the undereigned neteric public |
| | | , before me, the undersigned notary public, |
| personally appeared identification, which were | James Cardia | , proved to me through satisfactory evidence of |
| • | | , document in my presence and swore or affirmed |
| | | accurate to the best of (his) (her) knowledge |
| | | ed it voluntarily for its stated purpose. |
| and belief and acknowle | raged to the that (he) (she) sight | so it voluntarily for its stated purpose. |
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| SEAL | | |
| | Notary Public | |
| My commission exp | ires: | |
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Page 8 of 8

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned Assignor, hereby:

- Sell, assign and transfer to RXi Pharmaceuticals Corporation, a Delaware corporation 1. having a place of business at 1500 West Park Drive; Suite 210; Westborough, Massachusetts 01581, its successors, assigns and legal representatives, all hereinafter referred to as the Assignee, my entire right, title and interest for the United States and all foreign countries, in and to any and all inventions and designs which are disclosed in the application for United States Letters Patent filed in the United States Patent and Trademark Office on September 24, 2012 under No. 13/636,748, bearing Attorney Docket No. R0659.70019US02, and entitled RNA INTERFERENCE IN OCULAR INDICATIONS, and in and to the application and all corresponding provisional, 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 any of the 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;
- 2. Agree that the Assignee may apply for and receive Letters Patent and utility model and industrial design registrations for the inventions in its own name; and when requested, without charge to but at the expense of the Assignee, I agree to carry out in good faith the intent and purpose of this assignment, by executing all non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent, utility model and industrial design applications on any and all the inventions, by executing all rightful oaths, assignments, powers of attorney and other papers, by communicating to the Assignee all facts known to me relating to the inventions and the history thereof, and generally by doing everything reasonably possible which the Assignee shall consider desirable for aiding in securing and maintaining proper protection for the inventions and for vesting title to the inventions and all applications for patents and all patents on the inventions, in the Assignee;
- 3. Request the Director of the United States Patent and Trademark Office to issue the Letters Patent to the Assignee;
- 4. Authorize and request Wolf, Greenfield & Sacks, P.C. to supply any missing patent/application identification information or correct any errors in the patent/application identification information provided above, whether discovered prior to or after recordation; Covenant with the Assignee that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me; and
- 5. Appoint Assignee, through its designee, my attorney-in-fact to execute, in my name and on my behalf, any and all documents required to effectuate this Assignment, specifically including, but not limited to, those documents specified above and any necessary corrective assignments.

This instrument is executed under seal and signed under the pains and penalties of perjury under the laws of the United States of America.

Attorney Docket No. R0659.70019US02 2860003.1

Page 1 of 8

| Date | | Inventor: | Lyn Libertine |
|----------------------------|-------------------|---|---|
| | | Address: | 61 Nixon Road |
| | | | Framingham, MA 01701 |
| | | Citizenship: | US |
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| OOMMONING ALTHOU | **** | | |
| COMMONWEALTH OF | MASSACHUSETT | S | |
| COUNTY OF | | <u>:</u> . | |
| On this | day of | , | , before me, the undersigned notary public, |
| personally appeared | Lyn Liber | tine | , proved to me through satisfactory evidence of |
| identification, which were | 9 | | |
| to be the person who sig | ned the preceding | or attached of | document in my presence and swore or affirmed |
| | | | accurate to the best of (his) (her) knowledge |
| | | | ed it voluntarily for its stated purpose. |
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| • | Notary | Public | |
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Page 2 of 8

| 11.15,12 | Alfre |
|---|---|
| Date Inventor: | Anastasia Khvorova |
| Address: | 10 Rocklawn Road |
| | Westborough, MA 01581 |
| Citizenship: | US |
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| COMMONWEALTH OF MASSACHUSETTS COUNTY OF WOTUSETTS: | |
| On this 15 day of <u>Novembur</u> , <u>30 f</u> personally appeared Anastasia Khvorova | , before me, the undersigned notary public, proved to me through satisfactory evidence of |
| identification, which were MADL | . j |
| to be the person who signed the preceding or attached of | |
| to me that the contents of the document are truthful and and belief and acknowledged to me that (he) (she) signe | - |
| SEAL OLD OLD Y | lok |

My commission expires:

CAROL-JEAN ZYSK

Notary Public, Commonwealth of Massachusetts
My Commission Expires June 29, 2018

| Date | Inventor: | William Salomon |
|----------------------------|----------------------------------|---|
| | Address: | 210 Mountain Street East |
| | | Apt. 278 |
| | | Worcester, Massachusetts 01606 |
| | Citizenship: | US |
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| COMMONWEALTH OF N | MASSACHUSETTS | |
| COUNTY OF | | |
| On this | day of , | , before me, the undersigned notary public, |
| personally appeared | William Salomon | , proved to me through satisfactory evidence of |
| identification, which were | | |
| to be the person who sign | ned the preceding or attached o | document in my presence and swore or affirmed |
| to me that the contents of | the document are truthful and | accurate to the best of (his) (her) knowledge |
| and belief and acknowled | lged to me that (he) (she) signe | ed it voluntarily for its stated purpose. |
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| SEAL | | |
| - | Notary Public | |
| My commission expire | es: | |

| Date | In | ventor: | Joanne Kamens |
|----------------------------|--------------------------|-------------|---|
| | A | ddress: | 21 Wessex Road |
| | | | Newton, MA 02459 |
| | Citiz | enship: | US |
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| COMMONWEALTH OF | MASSACHUSETTS | | |
| COUNTY OF | : | | |
| On this | day of | , | , before me, the undersigned notary public, |
| personally appeared | Joanne Kamens | | , proved to me through satisfactory evidence of |
| identification, which were | | | - , |
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| | | | accurate to the best of (his) (her) knowledge |
| and belief and acknowle | dged to me that (he) (sh | ie) signe | d it voluntarily for its stated purpose. |
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| My commission expir | res: | | |

Page 5 of 8

| Date | Inventor: | Dmitry Samarsky |
|--------------------------|-----------------------------------|---|
| | Address: | 15 Wayside Road |
| | | Westborough, MA 01581 |
| | Citizenship: | US |
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| COMMONWEALTH O | F MASSACHUSETTS | |
| COUNTY OF | : | |
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| On this | day of , | , before me, the undersigned notary public, |
| personally appeared | Dmitry Samarsky | , proved to me through satisfactory evidence of |
| identification, which we | | 1 |
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| to me that the contents | of the document are truthful and | accurate to the best of (his) (her) knowledge |
| and belief and acknow | ledged to me that (he) (she) sign | ed it voluntarily for its stated purpose. |
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| SEAL | | <u> </u> |
| | Notary Public | - |
| My commission ex | pires: | |
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| Date | en entre en | Inventor: | Tod M. Woolf |
|--------------------------|---|----------------|---|
| | | Address: | 14 Babe Ruth Drive |
| | | | Sudbury, MA 01776-1942 |
| | | Citizenship: | US |
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| COMMONWEALTH OF | - MASSACHUSETT | S | |
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| On this | day of | | , before me, the undersigned notary public, |
| personally appeared | Tod M. W | ' | , proved to me through satisfactory evidence of |
| identification, which we | | | |
| to be the person who s | igned the preceding | or attached | document in my presence and swore or affirmed |
| to me that the contents | of the document are | e truthful and | accurate to the best of (his) (her) knowledge |
| and belief and acknowl | edged to me that (he | e) (she) sign | ed it voluntarily for its stated purpose. |
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| | • | / Public | |
| My commission exp | oires: | | |
| | | | |

Page 7 of 8

| Date | | Inventor: | James Cardia |
|---------------------------|---------------------|----------------|---|
| - | | Address: | 11 Bacon Street |
| | | | Franklin, MA 02038 |
| | | Citizenship: | US |
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| COMMONWEALTH OF | MASSACHUSETT | S | |
| COUNTY OF | | <u>:</u> - | |
| On this | day of | , | , before me, the undersigned notary public, |
| personally appeared | James Ca | ardia | , proved to me through satisfactory evidence of |
| identification, which wer | | | |
| • | | | document in my presence and swore or affirmed |
| | | | accurate to the best of (his) (her) knowledge |
| and belief and acknowle | adged to me that (h | e) (she) signe | ed it voluntarily for its stated purpose. |
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| SEAL | | | |
| | Notary | y Public | |
| My commission exp | ires: | | |

Page 8 of 8

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned Assignor, hereby:

- 1. Sell, assign and transfer to RXi Pharmaceuticals Corporation, a Delaware corporation having a place of business at 1500 West Park Drive; Suite 210; Westborough, Massachusetts 01581, its successors, assigns and legal representatives, all hereinafter referred to as the Assignee, my entire right, title and interest for the United States and all foreign countries, in and to any and all inventions and designs which are disclosed in the application for United States Letters Patent filed in the United States Patent and Trademark Office on September 24, 2012 under No. 13/636,748, bearing Attorney Docket No. R0659.70019US02. and entitled RNA INTERFERENCE IN OCULAR INDICATIONS, and in and to the application and all corresponding provisional, 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 any of the 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:
- 2. Agree that the Assignee may apply for and receive Letters Patent and utility model and industrial design registrations for the inventions in its own name; and when requested, without charge to but at the expense of the Assignee, I agree to carry out in good faith the intent and purpose of this assignment, by executing all non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent, utility model and industrial design applications on any and all the inventions, by executing all rightful oaths, assignments, powers of attorney and other papers, by communicating to the Assignee all facts known to me relating to the inventions and the history thereof, and generally by doing everything reasonably possible which the Assignee shall consider desirable for aiding in securing and maintaining proper protection for the inventions and for vesting title to the inventions and all applications for patents and all patents on the inventions, in the Assignee;
- 3. Request the Director of the United States Patent and Trademark Office to issue the Letters Patent to the Assignee;
- 4. Authorize and request Wolf, Greenfield & Sacks, P.C. to supply any missing patent/application identification information or correct any errors in the patent/application identification information provided above, whether discovered prior to or after recordation; Covenant with the Assignee that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me; and
- 5. Appoint Assignee, through its designee, my attorney-in-fact to execute, in my name and on my behalf, any and all documents required to effectuate this Assignment, specifically including, but not limited to, those documents specified above and any necessary corrective assignments.

This instrument is executed under seal and signed under the pains and penalties of perjury under the laws of the United States of America.

Attorney Docket No. R0659.70019US02 2860003.1

Page 1 of 8

| Date | Inventor: | Lyn Libertine |
|--------------------------|-----------------------------------|---|
| | Address: | 61 Nixon Road |
| | | Framingham, MA 01701 |
| | Citizenship: | US |
| | | |
| | | |
| COMMONWEALTH OF | MASSACHUSETTS | |
| COUNTY OF | : | |
| On this | day of , | , before me, the undersigned notary public, |
| personally appeared | Lyn Libertine | , proved to me through satisfactory evidence of |
| identification, which we | | , |
| | | document in my presence and swore or affirmed |
| | | accurate to the best of (his) (her) knowledge |
| and belief and acknowle | edged to me that (he) (she) signe | d it voluntarily for its stated purpose. |
| | | |
| SEAL | | |
| | Notary Public | · |
| My commission exp | ires: | · |

Page 2 of 8

| Date | | Inventor: | Anastasia Khvorova |
|--------------------------|----------------------|---------------------------------------|---|
| | | Address: | 10 Rocklawn Road |
| | | | Westborough, MA 01581 |
| | | Citizenship: | US |
| | | | |
| | | | |
| COMMONWEALTH OF | MASSACHUSETT | S | |
| COUNTY OF | | : | |
| | | - | |
| On this | day of | · · · · · · · · · · · · · · · · · · · | , before me, the undersigned notary public, |
| personally appeared | Anastasia Kh | ivorova | , proved to me through satisfactory evidence of |
| identification, which we | | | <u> </u> |
| to be the person who si | igned the preceding | or attached of | document in my presence and swore or affirmed |
| | | | accurate to the best of (his) (her) knowledge |
| and belief and acknowle | edged to me that (he | e) (she) signe | d it voluntarily for its stated purpose. |
| | | | |
| SEAL | | | |
| | | | |
| | Notary | Public | |

Page 3 of 8

Inventor: William Salomon

Address: 2 Farrar Avenue

Apt. 2

Worcester, Massachusetts 01604

Citizenship: US

| CO | MMO | NWE | ALTH | OF | MASSACHUSETT | S |
|----|-----|-----|------|----|---------------------|---|
| | | | 1. | Ł | 1 | |

COUNTY OF Worcester

On this

personally appeared

day of January , 2013, before me, the undersigned notary public, William Salomon, proved to me through satisfactory evidence of

identification, which were

to be the person who signed the preceding or attached document in my presence and swore or affirmed to me that the contents of the document are truthful and accurate to the best of (his) (her) knowledge and belief and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose.

SEAL

My commission expires:

Notary Public

April 20,2018

| Date | | Inventor: | Joanne Kamens |
|----------------------------|----------------------|---------------|---|
| | | Address: | 21 Wessex Road |
| | | | Newton, MA 02459 |
| | (| Citizenship: | US |
| | | | |
| | | | |
| COMMONWEALTH OF | MASSACHUSETTS | S | |
| COUNTY OF | : | | |
| On this | day of | , | , before me, the undersigned notary public, |
| personally appeared | Joanne Kam | nens | , proved to me through satisfactory evidence of |
| identification, which were | | | , |
| | | | document in my presence and swore or affirmed |
| | | | accurate to the best of (his) (her) knowledge |
| and belief and acknowle | agea to me that (ne) |) (sne) signe | ed it voluntarily for its stated purpose. |
| | | | |
| SEAL | | | |
| , | Notary I | Public | |
| My commission expir | res: | | |

Page 5 of 8

| Date | Inventor: | Dmitry Samarsky |
|----------------------------|----------------------------------|---|
| | Address: | 15 Wayside Road |
| | | Westborough, MA 01581 |
| | Citizenship: | US |
| | | |
| | | |
| | | |
| COMMONWEALTH OF | MASSACHUSETTS | |
| COUNTY OF | MASSACHUSETTS | |
| COUNTY OF | • | |
| On this | day of , | , before me, the undersigned notary public, |
| personally appeared | Dmitry Samarsky | , proved to me through satisfactory evidence of |
| identification, which were | | , |
| to be the person who sig | ned the preceding or attached o | document in my presence and swore or affirmed |
| to me that the contents of | of the document are truthful and | accurate to the best of (his) (her) knowledge |
| and belief and acknowle | dged to me that (he) (she) signe | ed it voluntarily for its stated purpose. |
| | | |
| SEAL | | |
| SEAL | | |
| | Notary Public | |
| My commission expi | res: | |
| | | |

Page 6 of 8

| | | |
|---|---|---|
| Date | Inventor: | Tod M. Woolf |
| | Address: | 14 Babe Ruth Drive |
| | | Sudbury, MA 01776-1942 |
| | Citizenship: | US |
| | | |
| | | |
| | | |
| | | |
| COMMONWEALTH O | F MASSACHUSETTS | |
| | | |
| COUNTY OF | : | |
| | day of , | , before me, the undersigned notary public, |
| On this | day of,, | , before me, the undersigned notary public, , proved to me through satisfactory evidence of |
| On this personally appeared | Tod M. Woolf | |
| On this personally appeared dentification, which we to be the person who s | Tod M. Woolf ere signed the preceding or attached of | , proved to me through satisfactory evidence of document in my presence and swore or affirmed |
| On this personally appeared identification, which we to be the person who s to me that the contents | Tod M. Woolf ere signed the preceding or attached of the document are truthful and | , proved to me through satisfactory evidence of document in my presence and swore or affirmed accurate to the best of (his) (her) knowledge |
| On this personally appeared identification, which we to be the person who s to me that the contents | Tod M. Woolf ere signed the preceding or attached of the document are truthful and | , proved to me through satisfactory evidence of document in my presence and swore or affirmed |
| On this personally appeared identification, which we to be the person who s to me that the contents | Tod M. Woolf ere signed the preceding or attached of the document are truthful and | , proved to me through satisfactory evidence of document in my presence and swore or affirmed accurate to the best of (his) (her) knowledge |
| On this personally appeared identification, which we to be the person who s to me that the contents and belief and acknow | Tod M. Woolf ere signed the preceding or attached of the document are truthful and | , proved to me through satisfactory evidence of document in my presence and swore or affirmed accurate to the best of (his) (her) knowledge |
| On this personally appeared identification, which we to be the person who s to me that the contents | Tod M. Woolf ere signed the preceding or attached of softhe document are truthful and ledged to me that (he) (she) signed | , proved to me through satisfactory evidence of document in my presence and swore or affirmed accurate to the best of (his) (her) knowledge |
| to me that the contents and belief and acknow | Tod M. Woolf ere signed the preceding or attached of the document are truthful and | , proved to me through satisfactory evidence of document in my presence and swore or affirmed accurate to the best of (his) (her) knowledge |

Page 7 of 8

| Date | Inventor: | James Cardia | |
|--|--------------------------|---|--|
| | Address: | 11 Bacon Street | |
| | | Franklin, MA 02038 | |
| | Citizenship: | US | |
| | | | |
| | | | |
| | | | |
| | | | |
| COMMONWEALTH OF MASSAC | HUSETTS | | |
| COUNTY OF | : | | |
| On this day of | , | , before me, the undersigned notary public, | |
| personally appeared | James Cardia | , proved to me through satisfactory evidence of | |
| identification, which were | | , 1 | |
| to be the person who signed the preceding or attached document in my presence and swore or affirmed | | | |
| to me that the contents of the document are truthful and accurate to the best of (his) (her) knowledge | | | |
| and belief and acknowledged to m | ie that (he) (she) signe | ed it voluntarily for its stated purpose. | |
| | | | |
| SEAL | | | |
| | Notary Public | | |
| My commission expires: | | | |

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned Assignor, hereby:

- Sell, assign and transfer to RXi Pharmaceuticals Corporation, a Delaware corporation having a place of business at 1500 West Park Drive; Suite 210; Westborough, Massachusetts 01581, its successors, assigns and legal representatives, all hereinafter referred to as the Assignee, my entire right, title and interest for the United States and all foreign countries, in and to any and all inventions and designs which are disclosed in the application for United States Letters Patent filed in the United States Patent and Trademark Office on September 24, 2012 under No. 13/636,748, bearing Attorney Docket No. R0659.70019US02, and entitled RNA INTERFERENCE IN OCULAR INDICATIONS, and in and to the application and all corresponding provisional, 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 any of the 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;
- 2. Agree that the Assignee may apply for and receive Letters Patent and utility model and industrial design registrations for the inventions in its own name; and when requested, without charge to but at the expense of the Assignee, I agree to carry out in good faith the intent and purpose of this assignment, by executing all non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent, utility model and industrial design applications on any and all the inventions, by executing all rightful oaths, assignments, powers of attorney and other papers, by communicating to the Assignee all facts known to me relating to the inventions and the history thereof, and generally by doing everything reasonably possible which the Assignee shall consider desirable for aiding in securing and maintaining proper protection for the inventions and for vesting title to the inventions and all applications for patents and all patents on the inventions, in the Assignee;
- 3. Request the Director of the United States Patent and Trademark Office to issue the Letters Patent to the Assignee;
- 4. Authorize and request Wolf, Greenfield & Sacks, P.C. to supply any missing patent/application identification information or correct any errors in the patent/application identification information provided above, whether discovered prior to or after recordation; Covenant with the Assignee that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me; and
- 5. Appoint Assignee, through its designee, my attorney-in-fact to execute, in my name and on my behalf, any and all documents required to effectuate this Assignment, specifically including, but not limited to, those documents specified above and any necessary corrective assignments.

This instrument is executed under seal and signed under the pains and penalties of perjury under the laws of the United States of America.

Attorney Docket No. R0659.70019US02 2860003.1

Page 1 of 8

| Date | Inventor: | Lyn Libertine | |
|--|-----------------|---|--|
| | Address: | 61 Nixon Road | |
| | | Framingham, MA 01701 | |
| | Citizenship: | US | |
| | | | |
| | | | |
| | | | |
| COMMONWEALTH OF | MASSACHUSETTS | | |
| COUNTY OF | : | | |
| On this | day of | before me the undersioned action will | |
| personally appeared | Lyn Libertine , | , before me, the undersigned notary public, | |
| identification, which were | | , proved to me through satisfactory evidence of | |
| • | | ' document in my presence and swore or affirmed | |
| to me that the contents of the document are truthful and accurate to the best of (his) (her) knowledge | | | |
| | | ed it voluntarily for its stated purpose. | |
| | | | |
| SEAL | | | |
| | Notary Public | | |
| My commission expi | | | |

Page 2 of 8

| Date | Inventor: | Anastasia Khvorova | |
|---|----------------------------------|---|--|
| | Address: | 10 Rocklawn Road | |
| | | Westborough, MA 01581 | |
| | Citizenship: | US | |
| | | | |
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| | | | |
| | | | |
| COMMONWEALTH OF | MASSACHUSETTS | | |
| COUNTY OF | <u></u> : | | |
| 0 41 | | | |
| On this | day of , | , before me, the undersigned notary public, | |
| personally appeared | Anastasia Khvorova | , proved to me through satisfactory evidence of | |
| identification, which were , | | | |
| to be the person who si | gned the preceding or attached | document in my presence and swore or affirmed | |
| to me that the contents | of the document are truthful and | d accurate to the best of (his) (her) knowledge | |
| and belief and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose. | | | |
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| | | | |
| SEAL | | | |
| | Notary Public | | |
| My commission exp | ires: | | |
| | | | |

Page 3 of 8

| Date | Inventor: | William Salomon |
|---------------------------|----------------------------------|---|
| | Address: | 210 Mountain Street East |
| | | Apt. 278 |
| | | Worcester, Massachusetts 01606 |
| | Citizenship: | • |
| | Oldzonomp. | |
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| | • | |
| | | |
| COMMONWEALTH OF | MASSACHUSETTS | |
| COUNTY OF | | |
| | <u> </u> | |
| On this | day of , | , before me, the undersigned notary public, |
| personally appeared | William Salomon | , proved to me through satisfactory evidence of |
| identification, which wer | e | · · · · · · · · · · · · · · · · · · · |
| to be the person who sig | gned the preceding or attached | document in my presence and swore or affirmed |
| to me that the contents | of the document are truthful and | accurate to the best of (his) (her) knowledge |
| and belief and acknowle | edged to me that (he) (she) sign | ed it voluntarily for its stated purpose. |
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| | | |
| SEAL | | |
| | Notary Public | |
| My commission exp | ires: | |

Inventor: Address: 21 Wessex Road Newton, MA 02459 Citizenship: US COMMONWEALTH OF MASSACHUSETTS Middlesey: **COUNTY OF** day of Joanne Kamens , 20/2, before me, the undersigned notary public, proved to me through satisfactory evidence of On this personally appeared identification, which were person who signed the preceding or attached document in my presence and swore or affirmed to me that the contents of the document are truthful and accurate to the best of (his) (her) knowledge and belief and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose. **SEAL** Notary Public My commission expires:

| Date | Inventor: | Dmitry Samarsky | |
|--|--------------------------------|---|--|
| | Address: | 15 Wayside Road | |
| | | Westborough, MA 01581 | |
| | Citizenship: | US | |
| | | | |
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| | | | |
| COMMONWEALTH OF | MASSACHUSETTS | | |
| COUNTY OF | : | | |
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| On this | day of , | , before me, the undersigned notary public, | |
| personally appeared | Dmitry Samarsky | , proved to me through satisfactory evidence of | |
| identification, which we | re | . 3 | |
| to be the person who si | gned the preceding or attached | document in my presence and swore or affirmed | |
| to me that the contents of the document are truthful and accurate to the best of (his) (her) knowledge | | | |
| and belief and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose. | | | |
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| | | | |
| SEAL | | | |
| | Notary Public | | |
| My commission exp | pires: | | |
| | | | |

Page 6 of 8

| Date | | Inventor: | Tod M. Woolf |
|--|----------------------|----------------|---|
| | | Address: | 14 Babe Ruth Drive |
| | | | Sudbury, MA 01776-1942 |
| | (| Citizenship: | US |
| | | | |
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| | | | |
| 001410111111111111111111111111111111111 | | _ | |
| COMMONWEALTH OF | MASSACHUSETTS | S | |
| COUNTY OF | | • | |
| On this | day of | , | , before me, the undersigned notary public, |
| personally appeared | Tod M. Wo | oolf | , proved to me through satisfactory evidence of |
| identification, which we | re re | | - , |
| to be the person who signed the preceding or attached document in my presence and swore or affirmed | | | |
| to me that the contents of the document are truthful and accurate to the best of (his) (her) knowledge | | | |
| and belief and acknowle | edged to me that (he | e) (she) signe | ed it voluntarily for its stated purpose. |
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| CEAL | | | |
| SEAL | | | |
| | Notary | Public | |
| My commission exp | ires: | | |
| | | | |

Page 7 of 8

| Date | Inventor: | James Cardia | |
|--|----------------------------------|---|--|
| | Address: | 11 Bacon Street | |
| | | Franklin, MA 02038 | |
| | Citizenship: | US | |
| | | | |
| | | | |
| COMMONWEALTH O | F MASSACHUSETTS | | |
| COUNTY OF | : | | |
| On this | day of , | , before me, the undersigned notary public, | |
| personally appeared | James Cardia | , proved to me through satisfactory evidence of | |
| identification, which we | re | | |
| to be the person who signed the preceding or attached document in my presence and swore or affirmed to me that the contents of the document are truthful and accurate to the best of (his) (her) knowledge | | | |
| and belief and acknow | edged to me that (he) (she) sign | ed it voluntarily for its stated purpose. | |
| SEAL | | | |
| | Notary Public | | |
| My commission ex | pires: | | |

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned Assignor, hereby:

- Sell, assign and transfer to RXi Pharmaceuticals Corporation, a Delaware corporation having a place of business at 1500 West Park Drive; Suite 210; Westborough, Massachusetts 01581, its successors, assigns and legal representatives, all hereinafter referred to as the Assignee, my entire right, title and interest for the United States and all foreign countries, in and to any and all inventions and designs which are disclosed in the application for United States Letters Patent filed in the United States Patent and Trademark Office on September 24, 2012 under No. 13/636,748, bearing Attorney Docket No. R0659.70019US02, and entitled RNA INTERFERENCE IN OCULAR INDICATIONS, and in and to the application and all corresponding provisional, 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 any of the 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;
- 2. Agree that the Assignee may apply for and receive Letters Patent and utility model and industrial design registrations for the inventions in its own name; and when requested, without charge to but at the expense of the Assignee, I agree to carry out in good faith the intent and purpose of this assignment, by executing all non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent, utility model and industrial design applications on any and all the inventions, by executing all rightful oaths, assignments, powers of attorney and other papers, by communicating to the Assignee all facts known to me relating to the inventions and the history thereof, and generally by doing everything reasonably possible which the Assignee shall consider desirable for aiding in securing and maintaining proper protection for the inventions and for vesting title to the inventions and all applications for patents and all patents on the inventions, in the Assignee;
- 3. Request the Director of the United States Patent and Trademark Office to issue the Letters Patent to the Assignee;
- 4. Authorize and request Wolf, Greenfield & Sacks, P.C. to supply any missing patent/application identification information or correct any errors in the patent/application identification information provided above, whether discovered prior to or after recordation; Covenant with the Assignee that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me; and
- 5. Appoint Assignee, through its designee, my attorney-in-fact to execute, in my name and on my behalf, any and all documents required to effectuate this Assignment, specifically including, but not limited to, those documents specified above and any necessary corrective assignments.

This instrument is executed under seal and signed under the pains and penalties of perjury under the laws of the United States of America.

Attorney Docket No. R0659.70019US02 2860003.1

Page 1 of 8

| Date | | Inventor: | Lyn Libertine |
|---------------------------|----------------------|---------------|---|
| | | Address: | 61 Nixon Road |
| | | | Framingham, MA 01701 |
| | (| Citizenship: | US |
| | | | |
| | | | |
| COMMONWEALTH OF | MASSACHUSETTS | 3 | |
| COUNTY OF | 1417100710110021110 | : : | |
| | | | |
| On this | day of | 3 | , before me, the undersigned notary public, |
| personally appeared | Lyn Libert | ine | , proved to me through satisfactory evidence of |
| identification, which wer | | | |
| to be the person who sig | gned the preceding | or attached | document in my presence and swore or affirmed |
| | | | I accurate to the best of (his) (her) knowledge |
| and belief and acknowle | edged to me that (he | e) (sne) sign | ed it voluntarily for its stated purpose. |
| | | | |
| SEAL | | | ÷ |
| OLAL | Notary | Public | |
| My commission exp | ires: | | |

| Date | Inventor | Anastasia Khvorova |
|--------------------------|----------------------------------|---|
| | Address | 10 Rocklawn Road |
| | | Westborough, MA 01581 |
| | Citizenship | US |
| | | |
| | | |
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| | | |
| COMMONWEALTH OF | F MASSACHUSETTS | |
| COUNTY OF | • | |
| On this | day of | , before me, the undersigned notary public, |
| personally appeared | Anastasia Khvorova | , proved to me through satisfactory evidence of |
| identification, which we | re | , |
| to be the person who s | igned the preceding or attached | document in my presence and swore or affirmed |
| | | d accurate to the best of (his) (her) knowledge |
| and belief and acknowl | ledged to me that (he) (she) sig | ned it voluntarily for its stated purpose. |
| | | |
| 0541 | | |
| SEAL | | |
| | Notary Public | |
| My commission exp | pires: | |

| Date | Inventor | : William Salomon |
|--------------------------|----------------------------------|--|
| | Address | : 2 Farrar Avenue |
| | | Apt. 2 |
| | | Worcester, Massachusetts 01604 |
| | Citizenship | : US |
| | - Children | |
| | | |
| | | |
| | | |
| COMMONWEALTH O | F MASSACHUSETTS | |
| COUNTY OF | : | |
| | | |
| On this | day of , | , before me, the undersigned notary public, |
| personally appeared | William Salomon | , proved to me through satisfactory evidence of |
| identification, which we | | , |
| | | d document in my presence and swore or affirmed |
| | | nd accurate to the best of (his) (her) knowledge |
| and belief and acknow | ledged to me that (he) (she) sig | ned it voluntarily for its stated purpose. |
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| OFAL | | |
| SEAL | N. D. I. | |
| | Notary Public | |
| My commission ex | pires: | |
| | | |

| Date | Inventor: | Joanne Kamens |
|--------------------------|---------------------------------------|---|
| | Address: | 21 Wessex Road |
| | | Newton, MA 02459 |
| | Citizenship: | US |
| | Ouzeriship. | |
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| | | |
| COMMONWEALTH OF | - MASSACHUSETTS | |
| COUNTY OF | <u> </u> | |
| On this | day of | , before me, the undersigned notary public, |
| On this | day of , | |
| personally appeared | Joanne Kamens | , proved to me through satisfactory evidence of |
| identification, which we | re | , |
| • | - | document in my presence and swore or affirmed |
| to me that the contents | of the document are truthful and | accurate to the best of (his) (her) knowledge |
| and belief and acknowl | edged to me that (he) (she) sign | ed it voluntarily for its stated purpose. |
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| SEAL | | |
| | Notary Public | |
| My commission exp | oires: | |
| y commiscion oxp | ··· · · · · · · · · · · · · · · · · · | |

Page 5 of 8

| Jan 03, 2013 | D. Sazell |
|---|---|
| Date Inventor: | Dmitry Samarsky |
| Address: | 15 Wayside Road |
| | Westborough, MA 01581 |
| Citizenship: | US |
| | |
| COMMONWEALTH OF MASSACHUSETTS | |
| COUNTY OF Worcester | |
| On this 3 day of January, 20 personally appeared Dmitry Samarsky | 13, before me, the undersigned notary public, , proved to me through satisfactory evidence of |
| identification, which were US Passport | , |
| to be the person who signed the preceding or attached | |
| to me that the contents of the document are truthful and and belief and acknowledged to me that (he) (she) signed | |
| SEAL Motary Public | lla |
| My commission expires: $9-22-17$ | |

TAMARA McGRILLEN

Notary Public
COMMONWEALTH OF MASSACHUSETTS
My Commission Expires
September 22, 2017

| Date | Inventor: | Tod M. Woolf |
|--------------------------|----------------------------------|---|
| | Address: | 14 Babe Ruth Drive |
| | | Sudbury, MA 01776-1942 |
| | Citizenship: | US |
| | | |
| | | |
| COMMONWEALTH OF | - MASSACHUSETTS | |
| COUNTY OF | : | |
| <u></u> | | |
| On this | day of , | , before me, the undersigned notary public, |
| personally appeared | Tod M. Woolf | , proved to me through satisfactory evidence of |
| identification, which we | | - |
| | | document in my presence and swore or affirmed |
| | | accurate to the best of (his) (her) knowledge |
| and belief and acknowl | edged to me that (he) (she) sign | ed it voluntarily for its stated purpose. |
| | | |
| 0541 | | |
| SEAL | | · |
| | Notary Public | |
| My commission exp | pires: | |
| and the second second | | |

| Date | ,, | Inventor: | James Cardia | |
|----------------------------|----------------------|-------------------|---|--|
| | | Address: | 11 Bacon Street | |
| | | | Franklin, MA 02038 | |
| | | Citizenship: | US | |
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| | | | | |
| COMMONWEALTH | OF MASSACHUSE | TTS | | |
| COUNTY OF | | <u>:</u> | | |
| On this | day of | | , before me, the undersigned notary public, | |
| personally appeared | | Cardia ' | , proved to me through satisfactory evidence of | |
| identification, which were | | | | |
| to be the person wh | no signed the preced | ing or attached | document in my presence and swore or affirmed | |
| | | | d accurate to the best of (his) (her) knowledge | |
| and belief and ackr | nowledged to me that | t (he) (she) sign | ed it voluntarily for its stated purpose. | |
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| OFAL | | | | |
| SEAL | N | tama Darbia | | |
| | No | tary Public | | |
| My commission | ı expires: | | | |
| | | | | |

Page 8 of 8

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned Assignor, hereby:

- Sell, assign and transfer to RXi Pharmaceuticals Corporation, a Delaware corporation having a place of business at 1500 West Park Drive; Suite 210; Westborough, Massachusetts 01581, its successors, assigns and legal representatives, all hereinafter referred to as the Assignee, my entire right, title and interest for the United States and all foreign countries, in and to any and all inventions and designs which are disclosed in the application for United States Letters Patent filed in the United States Patent and Trademark Office on September 24, 2012 under No. 13/636,748, bearing Attorney Docket No. R0659.70019US02, and entitled RNA INTERFERENCE IN OCULAR INDICATIONS, and in and to the application and all corresponding provisional, 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 any of the 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;
- 2. Agree that the Assignee may apply for and receive Letters Patent and utility model and industrial design registrations for the inventions in its own name; and when requested, without charge to but at the expense of the Assignee, I agree to carry out in good faith the intent and purpose of this assignment, by executing all non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent, utility model and industrial design applications on any and all the inventions, by executing all rightful oaths, assignments, powers of attorney and other papers, by communicating to the Assignee all facts known to me relating to the inventions and the history thereof, and generally by doing everything reasonably possible which the Assignee shall consider desirable for aiding in securing and maintaining proper protection for the inventions and for vesting title to the inventions and all applications for patents and all patents on the inventions, in the Assignee;
- 3. Request the Director of the United States Patent and Trademark Office to issue the Letters Patent to the Assignee;
- 4. Authorize and request Wolf, Greenfield & Sacks, P.C. to supply any missing patent/application identification information or correct any errors in the patent/application identification information provided above, whether discovered prior to or after recordation; Covenant with the Assignee that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me; and
- 5. Appoint Assignee, through its designee, my attorney-in-fact to execute, in my name and on my behalf, any and all documents required to effectuate this Assignment, specifically including, but not limited to, those documents specified above and any necessary corrective assignments.

This instrument is executed under seal and signed under the pains and penalties of perjury under the laws of the United States of America.

Page 1 of 8

| Date | Inventor: | Lyn Libertine |
|--------------------------|----------------------------------|---|
| | Address: | 61 Nixon Road |
| | | Framingham, MA 01701 |
| | Citizenship: | US |
| | | |
| | | |
| COMMONWEALTH OI | F MASSACHUSETTS | |
| COUNTY OF | <u>:</u> | |
| On this | day of , | , before me, the undersigned notary public, |
| personally appeared | Lyn Libertine | , proved to me through satisfactory evidence of |
| identification, which we | | |
| · · | | document in my presence and swore or affirmed |
| | | accurate to the best of (his) (her) knowledge |
| and belief and acknowl | edged to me that (he) (she) sign | ed it voluntarily for its stated purpose. |
| | | |
| OFAL | | |
| SEAL | | |
| | Notary Public | |
| My commission exp | oires: | |
| | | |

| Date | Inventor: | Anastasia Khvorova |
|--------------------------|--------------------|---|
| | Address: | 10 Rocklawn Road |
| | | Westborough, MA 01581 |
| | Citizenship: | US |
| | | |
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| | | |
| COMMONWEALTH OF | MASSACHUSETTS | |
| COUNTY OF | : | |
| On this | day of , | , before me, the undersigned notary public, |
| personally appeared | Anastasia Khvorova | , proved to me through satisfactory evidence of |
| identification, which we | | — proved to the through ballotatory evidence c. |
| • | | document in my presence and swore or affirmed |
| • | | d accurate to the best of (his) (her) knowledge |
| | | ned it voluntarily for its stated purpose. |
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| | | |
| SEAL | | |
| | Notary Public | |
| My commission exp | pires: | |

| Date | | Inventor: | William Salomon |
|--------------------------|-----------------------|--------------|---|
| | | Address: | 210 Mountain Street East |
| | | | Apt. 278 |
| | | | Worcester, Massachusetts 01606 |
| | C | Citizenship: | US |
| | | | |
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| COMMONWEALTH OF | * MASSACHUSETTS | ; | |
| COUNTY OF | : | | |
| On this | day of | 1 | , before me, the undersigned notary public, |
| personally appeared | William Salo | mon | , proved to me through satisfactory evidence of |
| identification, which we | re | | |
| to be the person who si | gned the preceding o | r attached | document in my presence and swore or affirmed |
| to me that the contents | of the document are | truthful and | accurate to the best of (his) (her) knowledge |
| and belief and acknowle | edged to me that (he) |) (she) sign | ed it voluntarily for its stated purpose. |
| | | | |
| SEAL | | | |
| SEAL | | 5 | |
| | Notary | Public | |
| My commission exp | oires: | | |

Page 4 of 8

| Date | Inventor: | Joanne Kamens |
|--------------------------|---------------------------------------|---|
| | Address: | 21 Wessex Road |
| | | Newton, MA 02459 |
| | Citizenship: | US |
| | | |
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| | | |
| COMMONWEALTH OF | MASSACHUSETTS | |
| COUNTY OF | : | |
| On this | da., af | before me, the undersigned noton, public |
| On this | day of, | , before me, the undersigned notary public, |
| personally appeared | Joanne Kamens | , proved to me through satisfactory evidence of |
| identification, which we | | document in my presence and swere or affirmed |
| • | • • | document in my presence and swore or affirmed |
| | | l accurate to the best of (his) (her) knowledge |
| and belief and acknowl | eaged to me that (he) (she) sign | ed it voluntarily for its stated purpose. |
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| SEAL | | |
| | Notary Public | |
| My commission exp | pires: | |
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| Date | | Inventor: | Dmitry Samarsky | |
|--|--------------------------|---------------|---|--|
| | | Address: | 15 Wayside Road | |
| | | | Westborough, MA 01581 | |
| | | Citizenship: | US | |
| | | | | |
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| COMMONWEAL | TH OF MASSACHUSETT | ·S | | |
| COUNTY OF | | <u>:</u> | | |
| On this | day of | | , before me, the undersigned notary public, | |
| | day of | areky , | , proved to me through satisfactory evidence of | |
| personally appeared Dmitry Samarsky, proved to me through satisfactory evidence of identification, which were, | | | | |
| | | or attached | document in my presence and swore or affirmed | |
| • | - | | accurate to the best of (his) (her) knowledge | |
| and belief and ac | knowledged to me that (h | e) (she) sign | ed it voluntarily for its stated purpose. | |
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| SEAL | | | 200004-0-0-0 | |
| | Notar | y Public | | |
| My commission expires: | | | | |
| | | | | |

12/12/12

Inventor: Tod M. Woolf

Address: 14 Babe Ruth Drive

Sudbury, MA 01776-1942

Citizenship: US

| COMMONWEALTH OF | The second control of |
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| COUNTY OF Mid | desex: |
| | |
| On this 12 | day of December, 2012, before me, the undersigned notary public, |
| personally appeared | Tod M. Woolf , proved to me through satisfactory evidence of |
| | e driver license, |
| · | gned the preceding or attached document in my presence and swore or affirmed |
| | of the document are truthful and accurate to the best of (his) (her) knowledge |
| and belief and acknowle | edged to me that (he) (she) signed it voluntarily for its stated purpose. |
| | U + 0 11. |
| SEAL | Juto E. Corolli |
| | Notary Public |
| | • |
| My commission exp | ires: |
| | JUSTINE E. GORODECKI |
| | Notary Public Commonwealth of Massachusetts |
| | My Commission Expires |
| | March 30, 2018 |

| Date | Inventor: | James Cardia |
|--------------------------|----------------------------------|---|
| | Address: | 11 Bacon Street |
| | | Franklin, MA 02038 |
| | Citizenship: | US |
| | | |
| | | |
| COMMONWEALTH OF | MASSACHUSETTS | |
| COUNTY OF | : | |
| On this | day of , | , before me, the undersigned notary public, |
| personally appeared | James Cardia | , proved to me through satisfactory evidence of |
| identification, which we | re | <u> </u> |
| • | • | document in my presence and swore or affirmed |
| | | I accurate to the best of (his) (her) knowledge |
| and belief and acknowle | edged to me that (he) (she) sign | ed it voluntarily for its stated purpose. |
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| SEAL | | |
| | Notary Public | |
| My commission exp | oires: | |

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned Assignor, hereby:

- Sell, assign and transfer to RXi Pharmaceuticals Corporation, a Delaware corporation having a place of business at 1500 West Park Drive; Suite 210; Westborough, Massachusetts 01581, its successors, assigns and legal representatives, all hereinafter referred to as the Assignee, my entire right, title and interest for the United States and all foreign countries, in and to any and all inventions and designs which are disclosed in the application for United States Letters Patent filed in the United States Patent and Trademark Office on September 24, 2012 under No. 13/636,748, bearing Attorney Docket No. R0659.70019US02, and entitled RNA INTERFERENCE IN OCULAR INDICATIONS, and in and to the application and all corresponding provisional, 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 any of the 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;
- 2. Agree that the Assignee may apply for and receive Letters Patent and utility model and industrial design registrations for the inventions in its own name; and when requested, without charge to but at the expense of the Assignee, I agree to carry out in good faith the intent and purpose of this assignment, by executing all non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent, utility model and industrial design applications on any and all the inventions, by executing all rightful oaths, assignments, powers of attorney and other papers, by communicating to the Assignee all facts known to me relating to the inventions and the history thereof, and generally by doing everything reasonably possible which the Assignee shall consider desirable for aiding in securing and maintaining proper protection for the inventions and for vesting title to the inventions and all applications for patents and all patents on the inventions, in the Assignee;
- 3. Request the Director of the United States Patent and Trademark Office to issue the Letters Patent to the Assignee;
- 4. Authorize and request Wolf, Greenfield & Sacks, P.C. to supply any missing patent/application identification information or correct any errors in the patent/application identification information provided above, whether discovered prior to or after recordation; Covenant with the Assignee that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me; and
- 5. Appoint Assignee, through its designee, my attorney-in-fact to execute, in my name and on my behalf, any and all documents required to effectuate this Assignment, specifically including, but not limited to, those documents specified above and any necessary corrective assignments.

This instrument is executed under seal and signed under the pains and penalties of perjury under the laws of the United States of America.

Page 1 of 8

| Date | | Inventor: | Lyn Libertine |
|--------------------------|----------------------|-----------------|---|
| | | Address: | 61 Nixon Road |
| | | | Framingham, MA 01701 |
| | | Citizenship: | US |
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| COMMONWEALTH OF | F MASSACHUSET | ΓS | |
| COUNTY OF | | _: _ | |
| On this | day of | , | , before me, the undersigned notary public, |
| personally appeared | Lyn Libe | rtine | , proved to me through satisfactory evidence of |
| identification, which we | re | | |
| • | | - | document in my presence and swore or affirmed |
| | | | accurate to the best of (his) (her) knowledge |
| and belief and acknowl | ledged to me that (r | ie) (she) signe | ed it voluntarily for its stated purpose. |
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| SEAL | | | |
| | Notar | ry Public | |
| My commission exp | pires: | | |

| Date | Invento | or: Anastasia Khvorova |
|----------------------------|-------------------------------|---|
| | Addres | s: 10 Rocklawn Road |
| | | Westborough, MA 01581 |
| | Citizensh | ip: US |
| | | |
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| | | |
| COMMONWEALTH OF | MASSACHUSETTS | |
| COUNTY OF | : | |
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| | day of , | , before me, the undersigned notary public, |
| personally appeared | Anastasia Khvorova | , proved to me through satisfactory evidence of |
| identification, which were | | , |
| | | ed document in my presence and swore or affirmed |
| | | and accurate to the best of (his) (her) knowledge |
| and belief and acknowle | agea to me that (ne) (sne) si | gned it voluntarily for its stated purpose. |
| | • | |
| SEAL | | |
| | Notary Public | |
| My commission expi | res: | |

Page 3 of 8

| Date | Invento | : William Salomon |
|--------------------------|---------------------------------|--|
| | Address | : 210 Mountain Street East |
| | | Apt. 278 |
| | | Worcester, Massachusetts 01606 |
| | Citizenship | o: US |
| | | |
| | | |
| COMMONWEALTH OF | F MASSACHUSETTS | |
| COUNTY OF | <u>:</u> | |
| On this | day of , | , before me, the undersigned notary public, |
| personally appeared | William Salomon | , proved to me through satisfactory evidence of |
| identification, which we | re | |
| to be the person who s | igned the preceding or attached | d document in my presence and swore or affirmed |
| | | nd accurate to the best of (his) (her) knowledge |
| and belief and acknowl | edged to me that (he) (she) sig | ned it voluntarily for its stated purpose. |
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| SEAL | | |
| | Notary Public | <u> </u> |
| My commission exp | pires: | |

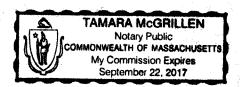
| Date | Inventor: | Joanne Kamens |
|--|----------------------------------|---|
| | Address: | 21 Wessex Road |
| | | Newton, MA 02459 |
| | Citizenship: | US |
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| | | |
| COMMONWEALTH OF | MASSACHUSETTS | |
| COUNTY OF | • | |
| On this | day of , | , before me, the undersigned notary public, |
| personally appeared | Joanne Kamens | , proved to me through satisfactory evidence of |
| identification, which wer | | |
| to be the person who sign | gned the preceding or attached | document in my presence and swore or affirmed |
| to me that the contents $% \left(t\right) =\left(t\right) \left(t\right) \left$ | of the document are truthful and | accurate to the best of (his) (her) knowledge |
| and belief and acknowle | edged to me that (he) (she) sign | ed it voluntarily for its stated purpose. |
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| SEAL | N. I. D. I.E. | |
| | Notary Public | |
| My commission exp | ires: | |

Page 5 of 8

| Date | Inventor: | Dmitry Samarsky |
|----------------------------|----------------------------------|---|
| | Address: | 15 Wayside Road |
| | | Westborough, MA 01581 |
| | Citizenship: | US |
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| COMMONWEALTH OF | MACCACULICETTO | |
| | WASSACHUSETTS | |
| COUNTY OF | • | |
| On this | day of , | , before me, the undersigned notary public, |
| personally appeared | Dmitry Samarsky | , proved to me through satisfactory evidence of |
| identification, which were | | -, |
| to be the person who sig | ned the preceding or attached | document in my presence and swore or affirmed |
| to me that the contents of | of the document are truthful and | accurate to the best of (his) (her) knowledge |
| and belief and acknowled | dged to me that (he) (she) sign | ed it voluntarily for its stated purpose. |
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| SEAL | | |
| SEAL . | | |
| | Notary Public | |
| My commission expir | | |

| Date | Inve | ntor: Tod M. Woolf |
|--------------------------|-----------------------------|--|
| | Addr | ress: 14 Babe Ruth Drive |
| | | Sudbury, MA 01776-1942 |
| | Citizens | ship: US |
| | | |
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| COMMONWEALTH O | F MASSACHUSETTS | |
| COUNTY OF | : | |
| On this | day of , | , before me, the undersigned notary public, |
| personally appeared | Tod M. Woolf | , proved to me through satisfactory evidence of |
| identification, which we | ere | |
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| | | Il and accurate to the best of (his) (her) knowledge |
| and belief and acknowl | edged to me that (he) (she) | signed it voluntarily for its stated purpose. |
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| SEAL | | |
| SEAL | | |
| | Notary Public | |
| My commission exp | oires: | |
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| 11/5/2012 | Man (m. lin |
|----------------------------|--|
| Date | Inventor: James Cardia |
| | Address: 11 Bacon Street |
| | Franklin, MA 02038 |
| | Citizenship: US |
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| | |
| COMMONWEALTH OF | MASSACHUSETTS |
| COUNTY OF (1) Ora | restre: |
| AL | ^ ^ |
| | day of $\frac{100}{100}$, $\frac{2012}{100}$ before me, the undersigned notary public, |
| personally appeared | James Cardia , proved to me through satisfactory evidence of |
| identification, which were | - PINOS LUNA |
| • | ned the preceding or attached document in my presence and swore or affirmed |
| | f the document are truthful and accurate to the best of (his) (her) knowledge dged to me that (he) (she) signed it voluntarily for its stated purpose. |
| and belief and acknowled | aged to the that (he) (she) signed it voluntarily for its stated purpose. |
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RECORDED: 06/17/2013

My commission expires:

Page 8 of 8