PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3158869

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date	
ANASTASIA KHVOROVA	08/07/2012	
WILLIAM SALOMON	08/07/2012	
JOANNE KAMENS	08/06/2012	
DMITRY SAMARSKY	09/04/2012	
TOD M. WOOLF	07/31/2012	
PAMELA A. PAVCO	08/30/2012	
JAMES CARDIA	06/26/2013	

RECEIVING PARTY DATA

Name:	RXI PHARMACEUTICALS CORPORATION
Street Address:	257 SIMARANO DRIVE
Internal Address:	SUITE 101
City:	MARLBOROUGH
State/Country:	MASSACHUSETTS
Postal Code:	01752

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14104450

CORRESPONDENCE DATA

Fax Number:

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: 617.646.8000

Email: patents_oonaj@wolfgreenfield.com

Correspondent Name: WOLF GREENFIELD
Address Line 1: 600 ATLANTIC AVENUE

Address Line 4: BOSTON, MASSACHUSETTS 02210

ATTORNEY DOCKET NUMBER:	R0659.70013US01
NAME OF SUBMITTER:	OONA M. JOHNSTONE
SIGNATURE:	/Oona M. Johnstone/
DATE SIGNED:	12/22/2014
	PAICNI

503112262 REEL: 034569 FRAME: 0511

Total Attachments: 44 source=R065970013US01-CASI-OMJ#page1.tif source=R065970013US01-CASI-OMJ#page2.tif source=R065970013US01-CASI-OMJ#page3.tif source=R065970013US01-CASI-OMJ#page4.tif source=R065970013US01-CASI-OMJ#page5.tif source=R065970013US01-CASI-OMJ#page6.tif source=R065970013US01-CASI-OMJ#page7.tif source=R065970013US01-CASI-OMJ#page8.tif source=R065970013US01-CASI-OMJ#page9.tif source=R065970013US01-CASI-OMJ#page10.tif source=R065970013US01-CASI-OMJ#page11.tif source=R065970013US01-CASI-OMJ#page12.tif source=R065970013US01-CASI-OMJ#page13.tif source=R065970013US01-CASI-OMJ#page14.tif source=R065970013US01-CASI-OMJ#page15.tif source=R065970013US01-CASI-OMJ#page16.tif source=R065970013US01-CASI-OMJ#page17.tif source=R065970013US01-CASI-OMJ#page18.tif source=R065970013US01-CASI-OMJ#page19.tif source=R065970013US01-CASI-OMJ#page20.tif source=R065970013US01-CASI-OMJ#page21.tif source=R065970013US01-CASI-OMJ#page22.tif source=R065970013US01-CASI-OMJ#page23.tif source=R065970013US01-CASI-OMJ#page24.tif source=R065970013US01-CASI-OMJ#page25.tif source=R065970013US01-CASI-OMJ#page26.tif source=R065970013US01-CASI-OMJ#page27.tif source=R065970013US01-CASI-OMJ#page28.tif source=R065970013US01-CASI-OMJ#page29.tif source=R065970013US01-CASI-OMJ#page30.tif source=R065970013US01-CASI-OMJ#page31.tif source=R065970013US01-CASI-OMJ#page32.tif source=R065970013US01-CASI-OMJ#page33.tif source=R065970013US01-CASI-OMJ#page34.tif source=R065970013US01-CASI-OMJ#page35.tif source=R065970013US01-CASI-OMJ#page36.tif source=R065970013US01-CASI-OMJ#page37.tif source=R065970013US01-CASI-OMJ#page38.tif source=R065970013US01-CASI-OMJ#page39.tif source=R065970013US01-CASI-OMJ#page40.tif source=R065970013US01-CASI-OMJ#page41.tif source=R065970013US01-CASI-OMJ#page42.tif source=R065970013US01-CASI-OMJ#page43.tif source=R065970013US01-CASI-OMJ#page44.tif

PATENT REEL: 034569 FRAME: 0512

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 60 Prescott Street; Worcester, Massachusetts 01605, 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 March 22, 2011 under No. 13/120,315, bearing Attorney Docket No. R0659.70013US00, and entitled RNA INTERFERENCE IN SKIN INDICATIONS, and in and to the application and 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 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, 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 patent;
- 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 and non-US patent authorities 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;
- 5. 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
- 6. 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. R0659.70013US00 2304071.1

8.7.2012		Lefre
Date	Inventor:	Anastasia Khvorova
	Address:	10 Rocklawn Road
		Westborough, MA 01581
	Citizenship:	US
	NITHOU MANAGEMENT	
STATE/COMMONWE	ALIHOF FOR STATE	
000N1101 <u>*</u>		
On this	day of Aufa, 21	, before me, the undersigned notary public,
personally appeared	Anastasia Khvorova	, proved to me through satisfactory evidence of
identification, which we	ere Markin Anne	earl
to be the person who s	signed the preceding or attached	document in my presence and swore or affirmed
		I 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.
	00000	
SEAL	1/4/2/1/(VW	
O LIFTE	Notary Public	
My commission ex	pires:	
	JOHN J. O'NEI	L, JR.
	Notary Public. Commonwealth of My Commission Expires Decer	mber 28, 2018

Date		Inventor:	William Salomon
		Address:	210 Mountain Street East
			Apt. 278
			Worcester, Massachusetts 01606
		Citizenship:	US
STATE/COMMONWEA	ALTH OF		
COUNTY OF		:	
On this	day of	,	, before me, the undersigned notary public,
personally appeared identification, which we	William S		_, proved to me through satisfactory evidence of
•	***************************************	ng or attached	document in my presence and swore or affirmed
•	•	•	accurate to the best of (his) (her) knowledge
and belief and acknowl	ledged to me that	(he) (she) sign	ed it voluntarily for its stated purpose.
SEAL			
	Nota	ry Public	
My commission exp	pires:		

Date	Inventor:	Joanne Kamens
	Address:	21 Wessex Road
		Newton, MA 02459
	Citizenship:	US
STATE/COMMONWEAL	TH OF	
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	8	
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 acknowle	dged to me that (he) (she) signe	ed it voluntarily for its stated purpose.
SEAL		
	Notary Public	-
My commission expi	res:	

Page 4 of 7

r: Dmitry Samarsky
s: 15 Wayside Road
Westborough, MA 01581
o: US

, before me, the undersigned notary public,
, proved to me through satisfactory evidence of
d document in my presence and swore or affirmed
nd accurate to the best of (his) (her) knowledge
ned it voluntarily for its stated purpose.
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Page 5 of 7

Date		Inventor:	Tod M. Woolf
		Address:	14 Babe Ruth Drive
			Sudbury, MA 01776-1942
		Citizenship:	US
	U TU 0E	<u>.</u>	
STATE/COMMONWEA COUNTY OF	LIH OF		Marina in Andrews (1994) of the Section (1994) of the Section (1994)
		*	
On this	day of	,	, before me, the undersigned notary public,
personally appeared	-		, proved to me through satisfactory evidence of
identification, which we	re		
to be the person who s	igned the	e preceding or attached	document in my presence and swore or affirmed
to me that the contents	of the d	ocument 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.
SEAL			a salah makanda makan
		Notary Public	
My commission exp	oires:		

Daniela A Daniela	
Date Inventor: Pamela A. Pavco	
Address: 822 Plateau Road	
Longmont, Colorado 80504	
Citizenship: US	
STATE/COMMONWEALTH OF	
COUNTY OF:	
On this day of,, before me, the undersigned notary public,	
personally appeared Pamela A. Pavco, proved to me through satisfactory evidence of	f
identification, which were	1
to be the person who signed the preceding or attached document in my presence and swore or affirmed	i
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:	

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 60 Prescott Street; Worcester, Massachusetts 01605, 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 March 22, 2011 under No. 13/120,315, bearing Attorney Docket No. R0659.70013US00, and entitled RNA INTERFERENCE IN SKIN INDICATIONS, and in and to the application and 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 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, 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 patent;
- 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 and non-US patent authorities 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;
- 5. 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
- 6. 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. R0659.70013US00 2304071.1

Date	Inventor:	Anastasia Khvorova
	Address:	10 Rocklawn Road
		Westborough, MA 01581
	Citizenship:	US
STATE/COMMONWE	ALTH OF	
COUNTY OF		
6		
		, before me, the undersigned notary public,
		_, 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
		ed it voluntarily for its stated purpose.
SEAL		
	Notary Public	
My commission ex	'nirec'	
My Commission Cx	PII VU.	

Page 2 of 7

William Salomon 210 Mountain Street East
Apt. 278
Worcester, Massachusetts 01606
US
(a), before me, the undersigned notary public, _, proved to me through satisfactory evidence of
document in my presence and swore or affirmed
d accurate to the best of (his) (her) knowledge
ed it voluntarily for its stated purpose.
lac

Date		Inventor:	Joanne Kamens
		Address:	21 Wessex Road
			Newton, MA 02459
		Citizenship:	US
STATE/COMMONWE	ALTH OF		
COUNTY OF			
On this	ala a.£		hefere me, the undersigned netery public
On this	_ day of Joanne Kai	,	, before me, the undersigned notary public, , proved to me through satisfactory evidence of
identification, which we		mens	_, proved to me imough satisfactory evidence of
· · · · · · · · · · · · · · · · · · ·		g or attached	document in my presence and swore or affirmed
· · · · · · · · · · · · · · · · · · ·	-		accurate to the best of (his) (her) knowledge
and belief and acknow	ledged to me that (h	ne) (she) sign	ed it voluntarily for its stated purpose.
CEAL			
SEAL	Notan	y Public	············
	inotary	y i dono	
My commission ex	pires:		

Date Inventor:	Dmitry Samarsky
Address:	15 Wayside Road
	Westborough, MA 01581
Citizenship:	US
STATE/COMMONWEALTH OF	
COUNTY OF :	
On this, day of,	, before me, the undersigned notary public,
	_, proved to me through satisfactory evidence of
identification, which were	desument in my procence and swore or affirmed
to be the person who signed the preceding or attached 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) sign	
and belief and admiowidaged to me that (no) (ene) e.g.	, ,
SEAL	
Notary Public	
My commission cyniros:	
My commission expires:	MARCH PROPERTY OF THE PARTY OF

Date Inventor:	Tod M. Woolf
Address:	14 Babe Ruth Drive
	Sudbury, MA 01776-1942
Citizenship:	US
STATE/COMMONWEALTH OF	
COUNTY OF:	
On this day of	, before me, the undersigned notary public,
On this day of, personally appeared Tod M. Woolf	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 an	d accurate to the best of (his) (her) knowledge
and belief and acknowledged to me that (he) (she) sign	ned it voluntarily for its stated purpose.
SEAL	
Notary Public	A PARTICULAR PROPERTY AND A PARTICULAR PROPE
•	
My commission expires:	-

Page 6 of 7

Date Inventor:	Pamela A. Pavco
Address:	822 Plateau Road
	Longmont, Colorado 80504
Citizenship:	US
STATE/COMMONWEALTH OF	
COUNTY OF:	
D. W. S. Harrison	, before me, the undersigned notary public,
On this day of, personally appeared Pamela A. Pavco	proved to me through satisfactory evidence of
identification, which were	_, proved to the through substactory evidence of
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) sign	
SEAL	
Notary Public	
My commission expires:	

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 60 Prescott Street; Worcester, Massachusetts 01605, 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 March 22, 2011 under No. 13/120,315, bearing Attorney Docket No. R0659.70013US00, and entitled RNA INTERFERENCE IN SKIN INDICATIONS, and in and to the application and 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 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, 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 patent:
- 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 and non-US patent authorities 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;
- 5. 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
- 6. 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. R0659.70013US00 2304071.1

		
Date		Anastasia Khvorova
	Address:	10 Rocklawn Road
		Westborough, MA 01581
	Citizenship:	US
STATE/COMMONWE	ALTH OF	
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	ere	,
to be the person who s	signed the preceding or attached	document in my presence and swore or affirmed
		d accurate to the best of (his) (her) knowledge
and belief and acknow	rledged to me that (he) (she) sign	ed it voluntarily for its stated purpose.
SEAL		MATERIAL CONTROL CONTR
	Notary Public	
My commission ex	nires:	

Page 2 of 7

Date		Inventor:	William Salomon
		Address:	210 Mountain Street East
			Apt. 278
			Worcester, Massachusetts 01606
		Citizenship:	US
	ALTUOE		
STATE/COMMONWE	ALTH OF		
COUNTY OF		<u>.</u> :	
On this	day of	,	, before me, the undersigned notary public,
personally appeared			_, proved to me through satisfactory evidence of
identification, which we	ere		,
to be the person who s	signed the preceding	or attached	document in my presence and swore or affirmed
to me that the contents	s of the document are	e truthful and	accurate to the best of (his) (her) knowledge
and belief and acknow	ledged to me that (he	e) (she) signe	ed it voluntarily for its stated purpose.
SEAL			
	Notary	Public	
My commission ex	niree:		
wy commission ex	Piles		······································

8/6/2012	Jus Lamen
Date Inventor:	Joanne Kamens
Address:	21 Wessex Road
	Newton, MA 02459
Citizenship:	US
STATE/COMMONWEALTH OF MUSSACHUSET	ts
COUNTY OF Middlesex:	
On this 6 day of August, 20	12, before me, the undersigned notary public,
personally appearedJoanne Kamens	_, proved to me through satisfactory evidence of
identification, which were Mussachusetts Driver	's License,
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) sign	ed it voluntarily for its stated purpose.
SEAL Notary Public	MAURA L. TUCKER NOTARY PUBLIC Commonwealth of Massachusetts My Commission Expires on October 26, 2018

October 26, 2018

My commission expires:

Date Inventor:	Dmitry Samarsky
Address:	15 Wayside Road
	Westborough, MA 01581
Citizenship:	US
STATE/COMMONWEALTH OF	
COUNTY OF:	
On this day of ,	, before me, the undersigned notary public,
On this day of , personally appeared Dmitry Samarsky	proved to me through satisfactory evidence of
identification, which were	, provod to the alloagh salishadary oversite or
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	
and belief and acknowledged to me that (he) (she) sign	ned it voluntarily for its stated purpose.
OFAL	
SEAL Notary Public	
Notary i ubile	
My commission expires:	

Date	Inventor:	Tod M. Woolf
	Address:	14 Babe Ruth Drive
		Sudbury, MA 01776-1942
	Citizenship:	US
STATE/COMMONWEALTH OF		
COUNTY OF	*	
On this day of		, before me, the undersigned notary public,
		, 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 do	cument are truthful and	accurate to the best of (his) (her) knowledge
and belief and acknowledged to	me that (he) (she) sign	ed it voluntarily for its stated purpose.
SEAL		
OLAL	Notary Public	
	,	
My commission expires: _		

Date	Inventor:	Pamela A. Pavco
	Address:	822 Plateau Road
		Longmont, Colorado 80504
	Citizenship:	US
STATE/COMMONWEALTH OF		
COUNTY OF	:	
On this day of		, before me, the undersigned notary public,
		, proved to me through satisfactory evidence of
to be the person who signed the	preceding or attached	document in my presence and swore or affirmed
		accurate to the best of (his) (her) knowledge
and belief and acknowledged to	me that (he) (she) sign	ed it voluntarily for its stated purpose.
SEAL		
	Notary Public	
	-	
My commission expires:		

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 60 Prescott Street; Worcester, Massachusetts 01605, 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 March 22, 2011 under No. 13/120.315, bearing Attorney Docket No. R0659.70013US00, and entitled RNA INTERFERENCE IN SKIN INDICATIONS, and in and to the application and 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 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, 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 patent;
- 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 and non-US patent authorities 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;
- 5. 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
- 6. 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. R0659.70013US00 2304071.1

Date		Inventor:	Anastasia Khvorova
		Address:	10 Rocklawn Road
			Westborough, MA 01581
		Citizenship:	US
STATE/COMMONWE	ALTH OF		
COUNTY OF		:	
On this	_ day of	,	, before me, the undersigned notary public,
personally appeared			_, proved to me through satisfactory evidence of
identification, which w			
to be the person who	signed the preced	ling or attached	document in my presence and swore or affirmed
			accurate to the best of (his) (her) knowledge
and belief and acknow	vledged to me that	t (he) (she) sign	ed it voluntarily for its stated purpose.
SEAL			
	Not	ary Public	
My commission ex	cpires:		1400-1-1-1-1-1

Date		Inventor:	William Salomon
		Address:	210 Mountain Street East
			Apt. 278
			Worcester, Massachusetts 01606
		Citizenship:	US
		•	
STATE/COMMONWEA	ALTH OF		
COUNTY OF		•	
On this			, before me, the undersigned notary public,
		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	ledged to me that (h	e) (she) sign	ed it voluntarily for its stated purpose.
SEAL			
	Notary	Public	
My commission ex	pires:		

Date		Inventor:	Joanne Kamens
		Address:	21 Wessex Road
			Newton, MA 02459
		Citizenship:	US
STATE/COMMONWE	ALTH OF		·
COUNTY OF		•	
On this	day of		, before me, the undersigned notary public,
personally appeared	-		, proved to me through satisfactory evidence of
identification, which we	ere		
to be the person who s	signed the precedi	ing or attached	document in my presence and swore or affirmed
to me that the contents	s 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.
054			
SEAL			B-B-M-B-M-MAN-
	Nota	ary Public	
My commission ex	pires:		

Sep 04, 2012	D. Samalac			
Date Inventor:	Dmitry Samarsky			
Address:	15 Wayside Road			
	Westborough, MA 01581			
Citizenship:	US			
•				
li rachectla				
STATE/COMMONWEALTH OF Massachusells				
COUNTY OF Worcester:				
On this H day of Sandanahar 00	12 hafana ara Mariadaniana da akan madi			
	12, before me, the undersigned notary public,			
personally appeared Dmitry Samarsky, proved to me through satisfactory evidence of identification, which were Mass. License				
***************************************	,			
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) sign	ed it voluntarily for its stated purpose.			
SEAL Leuzman	<u> </u>			
Notary Public				
My commission expires: Mar. 14, 2019				

Date	Inventor:	Tod M. Woolf
	Address:	14 Babe Ruth Drive
		Sudbury, MA 01776-1942
	Citizenship:	US
STATE/COMMONWEALTH OF		
COUNTY OF	•	
On this day of		
		, before me, the undersigned notary public,, proved to me through satisfactory evidence of
identification, which were	Od IVI. VVOOII	_, proved to me through satisfactory evidence of
, value of the second of the s	preceding or attached of	document in my presence and swore or affirmed
	-	accurate to the best of (his) (her) knowledge
and belief and acknowledged to n	ne that (he) (she) signe	ed it voluntarily for its stated purpose.
OE AL		
SEAL	Notary Public	
	Notary Fublic	
My commission expires:		

Date	Inventor:	Pamela A. Pavco
	Address:	822 Plateau Road
		Longmont, Colorado 80504
	Citizenship:	US
STATE/COMMONWEALT	TH OF	
COUNTY OF	:	
On this da	ay of .	, before me, the undersigned notary public,
personally appeared		_, proved to me through satisfactory evidence of
identification, which were		
to be the person who sign	ned the preceding or attached 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 acknowled	ged to me that (he) (she) signe	ed it voluntarily for its stated purpose.
SEAL		
_	Notary Public	
My commission expire	es:	

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 60 Prescott Street; Worcester, Massachusetts 01605, 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 March 22, 2011 under No. 13/120,315, bearing Attorney Docket No. R0659.70013US00, and entitled RNA INTERFERENCE IN SKIN INDICATIONS, and in and to the application and 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 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, 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 patent:
- 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 and non-US patent authorities 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:
- 5. 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
- 6. 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. R0659.70013US00 2304071.1

Date		nventor:	Anastasia Khvorova
	Į.	Address:	10 Rocklawn Road
			Westborough, MA 01581
	Citiz	zenship:	US
STATE/COMMONWE	ALTH OF		
COUNTY OF	:		
On this	_ day of	,	, before me, the undersigned notary public,
personally appeared		va	_, proved to me through satisfactory evidence of
identification, which w			,
			document in my presence and swore or affirmed
			accurate to the best of (his) (her) knowledge
and belief and acknow	rledged to me that (he) (s	she) signe	ed it voluntarily for its stated purpose.
054			
SEAL			
	Notary Pub	olic	
My commission ex	pires:		

Page 2 of 7

Date	Invento	or: William Salomon
	Addres	ss: 210 Mountain Street East
		Apt. 278
		Worcester, Massachusetts 01606
	Citizensh	ip: US
STATE/COMMONWE	ALTH OF	
COUNTY OF		And the state of t
	.,	
On this		, before me, the undersigned notary public,
personally appeared		, proved to me through satisfactory evidence of
identification, which w	*** ***********************************	
·	"	ed document in my presence and swore or affirmed
		and accurate to the best of (his) (her) knowledge
and belief and acknow	rledged to me that (he) (she) si	igned it voluntarily for its stated purpose.
SEAL		
	Notary Public	***************************************
	-	
My commission ex	pires:	

Page 3 of 7

Date	 Inven	tor: Joanne Kamens
	Addre	ess: 21 Wessex Road
		Newton, MA 02459
	Citizensh	
	Ottizerisi	iip. 03
STATE/COMMONWE	ALTH OF	
COUNTY OF	*	
On this	_ day of,	, before me, the undersigned notary public,
		, proved to me through satisfactory evidence of
identification, which w	ere	
to be the person who	signed the preceding or attach	ned document in my presence and swore or affirmed
to me that the content	s of the document are truthful	and accurate to the best of (his) (her) knowledge
and belief and acknow	vledged to me that (he) (she) s	signed it voluntarily for its stated purpose.
SEAL		
	Notary Public	
My commission ex	vniros:	
iviy commission ex	vpiies.	

Date		Inventor:	Dmitry Samarsky
		Address:	15 Wayside Road
			Westborough, MA 01581
		Citizenship:	US
STATE/COMMONWE	ALTH OF		
COUNTY OF		:	
On this	day of	,	, before me, the undersigned notary public,
personally appeared		Samarsky	_, proved to me through satisfactory evidence of
identification, which we	ere		
to be the person who	signed the prece	ding or attached	document in my presence and swore or affirmed
to me that the contents	s of the documer	nt are truthful and	accurate to the best of (his) (her) knowledge
and belief and acknow	vledged to me tha	at (he) (she) signe	ed it voluntarily for its stated purpose.
SEAL			
SEAL	No	tary Public	
		•	

7/3/12

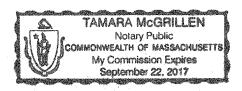
Inventor: Tod M. Woolf

Address: 14 Babe Ruth Drive

Sudbury, MA 01776-1942

Citizenship: US

STATE/COMMONWEA	LTH OF Massachusetts
On this	day of July, before me, the undersigned notary public, Tod M. Woolf, proved to me through satisfactory evidence of
•	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 acknowl	edged to me that (he) (she) signed it voluntarily for its stated purpose.
SEAL	Motary Public Public
My commission exp	pires: 0-22-17



Date Inventor:	Pamela A. Pavco
Address:	822 Plateau Road
	Longmont, Colorado 80504
Citizenship:	US
STATE/COMMONWEALTH OF	
COUNTY OF:	
	, before me, the undersigned notary public,
personally appeared Pamela A. Pavco	_, proved to me through satisfactory evidence of
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	
and belief and acknowledged to me that (he) (she) signed	
SEAL	
Notary Public	
My commission expires:	

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 60 Prescott Street; Worcester, Massachusetts 01605, 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 March 22, 2011 under No. 13/120,315, bearing Attorney Docket No. R0659.70013US00, and entitled RNA INTERFERENCE IN SKIN INDICATIONS, and in and to the application and 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 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, 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 patent;
- 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 and non-US patent authorities 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;
- 5. 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
- 6. 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. R0659.70013US00 2304071.1

Date	Inventor:	Anastasia Khvorova
	Address:	10 Rocklawn Road
		Westborough, MA 01581
	Citizenship:	US
07.475.00.00.00.00.00.00.00.00.00.00.00.00.00		
STATE/COMMONWE	ALTH OF	MATTER CONTROL
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	ere	,
to be the person who :	signed the preceding or attached	document in my presence and swore or affirmed
to me that the content	s 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 ex	pires:	

Date Inver	itor: William Salomon
Addre	ess: 210 Mountain Street East
	Apt. 278
	Worcester, Massachusetts 01606
Citizens	hip: US
STATE/COMMONWEALTH OF	
COUNTY OF:	
_	*
	, before me, the undersigned notary public,
	, proved to me through satisfactory evidence of
identification, which were	,
	ned document in my presence and swore or affirmed
to me that the contents of the document are truthful	
and belief and acknowledged to me that (he) (she)	signed it voluntarily for its stated purpose.
SEAL	
Notary Public	
My commission expires:	

Date	Inventor:	Joanne Kamens
	Address:	21 Wessex Road
		Newton, MA 02459
	Citizenship:	US
STATE/COMMONWE	ALTH OF	-
COUNTY OF	:	
On this	_ day of,	, before me, the undersigned notary public,
personally appeared		_, proved to me through satisfactory evidence of
identification, which we		,
		document in my presence and swore or affirmed
to me that the contents	s of the document are truthful and	accurate to the best of (his) (her) knowledge
and belief and acknow	ledged to me that (he) (she) signe	ed it voluntarily for its stated purpose.
SEAL		
	Notary Public	
My commission ex	pires:	

Date	Inventor:	Dmitry Samarsky
	Address:	15 Wayside Road
		Westborough, MA 01581
	Citizenship:	US
STATE/COMMONWE	ALTH OF	
COUNTY OF		
On this	_ day of,,	, before me, the undersigned notary public,
		_, 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 acknow	ledged to me that (he) (she) signed	ed it voluntarily for its stated purpose.
SEAL		
	Notary Public	
My commission ex	pires:	

Date	Inventor:	Tod M. Woolf
	Address:	14 Babe Ruth Drive
		Sudbury, MA 01776-1942
	Citizenship:	US
STATE/COMMONWEALTH OF	***************************************	
COUNTY OF	•	
On this day of	,	, before me, the undersigned notary public,
		_, 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 acknowledged to	me that (he) (she) signe	ed it voluntarily for its stated purpose.
SEAL		
*************************************	Notary Public	
My commission expires:		

8/30/12_	Ame (1) /2-	
Date Inventor:	Pamela A. Pavco	
Address:	822 Plateau Road	
	Longmont, Colorado 80504	
Citizenship:	US	
STATE/COMMONWEALTH OF MASSAchuse 15 COUNTY OF Wassachuse 15 On this 30 day of Massachuse 15 On this 30 day of Massachuse 15 Pamela A. Pavco , proved to me through satisfactory evidence of identification, which were 1000000 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	<u> Jua</u>	
My commission expires: 9-22-17		
TAMARA MCCRITEN		

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

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 1. 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 March 22, 2011 under No. 13/120,315, bearing Attorney Docket No. R0659.70013US00, and entitled RNA INTERFERENCE IN SKIN INDICATIONS, and in and to the application and 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 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, 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 patent;
- 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 and non-US patent authorities 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;
- 5. 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
- 6. 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. R0659.70013US00 **3050452.1**

6/26/2013	Man le la
Date Inventor:	James Cardia
Address;	11 Bacon Street
	Franklin, MA 02038
Citizenship:	US
STATE/COMMONWEALTH OF MASSACHUS COUNTY OF 11/01/08/12/28	ett3
1.	
On this 26 day of June, 201	$\frac{13}{3}$, before me, the undersigned notary public,
personally appeared James Cardia	, proved to me through satisfactory evidence of
identification, which wereMA Drivers	3 License
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	ed it voluntarily for its stated purpose.
SEAL Rotary Public	<u>u</u>
My commission expires: 9-22-47	

TAMARAI

TAMARA MCGRILLEN

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

Attorney Docket No. R0659.70013US00 **3050452.1**

RECORDED: 12/22/2014

Page 2 of 2