# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT2800304

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
DUNCAN BROWN	02/15/2013
JAMES J. CUNNINGHAM	01/30/2013
MARIAN GINDY	01/24/2013
VICTORIA PICKERING	01/30/2013
MATTHEW G. STANTON	01/24/2013
STEVEN M. STIRDIVANT	01/22/2013
WALTER R. STRAPPS	01/24/2013

# **RECEIVING PARTY DATA**

Name:	MERCK SHARP & DOHME CORP.
Street Address:	126 EAST LINCOLN AVENUE
City:	RAHWAY
State/Country:	NEW JERSEY
Postal Code:	07065

# **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	13937412

## **CORRESPONDENCE DATA**

Fax Number:

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via

US Mail.

**Phone:** 617-4496500

Email: docket@mccarter.com

Correspondent Name: MCCARTER & ENGLISH, LLP

Address Line 1: 265 FRANKLIN STREET

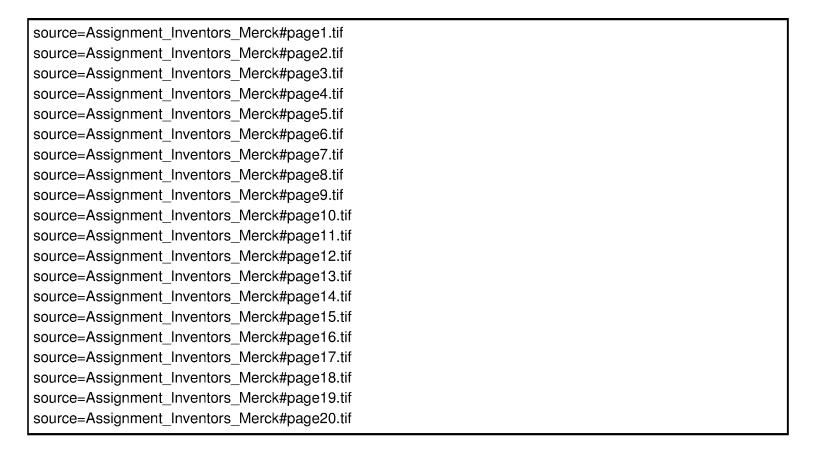
Address Line 4: BOSTON, MASSACHUSETTS 02110

ATTORNEY DOCKET NUMBER:	121301-01703
NAME OF SUBMITTER:	MARIA LACCOTRIPE ZACHARAKIS, PH.D
SIGNATURE:	/MLZ/
DATE SIGNED:	04/04/2014

**Total Attachments: 20** 

PATENT
REEL: 032600 FRAME: 0953

502753708



PATENT REEL: 032600 FRAME: 0954

### WORLDWIDE ASSIGNMENT

WHEREAS, INVE,

(1) Duncan Brown, located at Berkeley, CA 94708,

(2) James J. Cunningham, located at Devon, PA 19333,

(3) Marian Gindy, located at North Wales, PA 19454, (4) Victoria Pickering, located at San Mateo, CA 94403,

(5) Matthew G. Stanton, located at Mariton, NJ 08053,(6) Steven M. Stirdivant, located at Cary, NC 27713,

(7) Walter R. Strapps, located at Doylestown, PA 18901,

(hereinafter ASSIGNOR(S)), is/are the inventor(s) of the invention described in an application for Petents having the Attorney Docket Number indicated above and the following Title of the Invention:

RNA Interference Mediated Inhibition of Catenin (Cadherin-Associated Protein), Beta 1 (CTNNB1) Gene Expression Using Short Interfering Nucleic Acid (siNA)

and/or in the following application(s):

U.S. Provisional Application No. 61/370,064 filed on August 02, 2010; PCT International Application No. PCT/US2011/046178 having a filing date of August 02, 2011

WHEREAS I/WE covenant that the rights and property herein conveyed are free and clear of any encumbrance, and that I/we have the full right to convey the same as herein expressed.

WHEREAS, Merck Sharp & Dohme Corp., a corporation organized under the laws of the State of New Jersey, having an office at 126 East Lincoln Avenue, Rahway, New Jersey 07065, and its successors, assigns and legal representatives (hereinafter ASSIGNEE), is desirous of obtaining the entire right, title and interest in, to and under the invention disclosed in said application or applications;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I/we, said ASSIGNOR(S), do each hereby sell, assign and transfer or confirm the grant and assignment to said ASSIGNEE my/our entire right, title and interest in all countries of the world in and to my/our invention described in said application for Patents, in and to the right to file patent applications in the name of ASSIGNEE, its designee, or in any or all of our names, at its election, on the aforesaid invention in all countries of the world, together with all rights of priority in the aforesaid countries deriving from the above-identified application for Patents under the International Convention for the Protection of Industrial Property, under the Inter-American Convention relating to Inventions, Patents, Designs and Industrial Models and under any other international arrangement relating to patents or intellectual property, in and to any and all Letters Patent that are granted from the aforesaid application for Patents, in and to any applications claiming priority benefits to a provisional patent application or other applications filed on said invention, and in and to any continuations, divisions, reexaminations, reissues, renewals and extensions thereof of any of said Letters Patent, the same to be held and enjoyed by said ASSIGNEE, to the full ends of the terms for which all Letters Patent therefore may be granted, as fully and entirely as the same would have been held and enjoyed by us if this assignment and sale had not been made.

AND I/WE HEREBY covenant and agree that we will at any time, upon the request and at the expense of ASSIGNEE, without further compensation or charge to said ASSIGNEE, execute and deliver any and all documents that may be necessary or desirable to perfect the title to the foregoing invention, patent applications, and Letters Patent and continuations, divisions, reexaminations, reissues, renewals and extensions thereof in the name of ASSIGNEE, including the execution and procurement of any and all further documents evidencing this assignment and sale as may be necessary or desirable for recording the same in the Patent Office of any country concerned, and will make all rightful oaths and declarations and do all lawful acts requisite for procuring the same or for aiding therein.

I/WE HEREBY authorize ASSIGNEE to insert in this instrument the Application Number(s) and the filing date(s) of said application for Patents when officially notified thereof.

This document may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, but all such components shall together constitute but one and the same document.

Computer Generated Yemptata "Assignment-Merck Sharp & Dohme. Single Assignee Worldwide" (Assignment) Merck Sharp & Dohme Corp. 11/04/2010

Executed this 5 day of Februar	ツー、2013
Executed this <u>5</u> day of <u>1700 000</u>	J
Duncan Brown	
ACKNOWLEDGEMENT	
State of California	) } s.s.:
County of Alameda	) b.b.
on the 5 days Photos	. 2013 personally appeared Duncan Brown, who proved to me on the
	son whose name is subscribed to within instrument and acknowledged to me that
	icity, and that by his signature on the instrument in person, or the entity upon
behalf of which the person acted, executed	I the instrument.
I certify under PENALTY OF PER	JURY under the laws of the State of California that the foregoing paragraph is true
and correct.	
WITNESS my hand and official seal,	
distributed and the distri	A.K. SINGH
(Seal) 🥻 👔 Commissi	on # 1904941 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (
Alame	tos rounth # # isotat k. opur
White the the state of the stat	pires Sep 20, 2014 &
Executed this day of	, 2013
James J. Cunningham	
ACKNOWLEDGEMENT	
Commonwealth of Pennsylvania	
County of	) s.s.: )
On this day of known, and known by me to be the same ; acknowledged that he (she) executed the	, 2013 personally appeared before me James J. Cunningham, to me person described in and who executed the foregoing instrument, and same, of his (her) own free will for the purpose set forth.
(Seal)	
	Notary Public

Page 2 of 5
Computer Centraled Template "Assignment-Merck Sharp & Dohms, Single Assignee Worldwide" (Assignment) Merck Sharp & Dohms Corp., 1184/2010

Executed this day of	, 2013
Marian Gindy	
ACKNOWLEDGEMENT	
Commonwealth of Pennsylvania	) )
County of Montgomery	) 8.5 )
On this day of known by me to be the same person descri (she) executed the same, of his (her) own fi	, 2013 personally appeared before me Marian Gindy, to me known, and bed in and who executed the foregoing instrument, and acknowledged that he ree will for the purpose set forth.
(Seal)	
	Notary Public
Executed this day of	, 2013
Victoria Pickering	
ACKNOWLEDGEMENT	
State of California	)
County of San Mateo	) s.s.: )
On this day of and known by me to be the same person do he (she) executed the same, of his (her) ov	, 2013 personally appeared before me Victoria Pickering, to me known escribed in and who executed the foregoing instrument, and acknowledged that we free will for the purpose set forth.
(Seal)	
	Notary Public

Page 3 of 5
Conguter Generated Tempiste "Assignment-Merck Sharp & Dohme, Single Assignse Worldwide" (Assignment) Merck Sharp & Dohme Com. 11494/2010

Executed this day of	_, 2013		
Matthew G. Stanton			
ACKNOWLEDGEMENT			
Commonwealth of Pennsylvania	} s.s.:: }		
County of Montgomery	) 3.a		
On this day of known, and known by me to be the same perso acknowledged that he (she) executed the same	, 2013 personally appeared before me Matthew G. Stanton, to me in described in and who executed the foregoing instrument, and i, of his (her) own free will for the purpose set forth.		
(Seal)			
	Notary Public		
Executed this day of Steven M. Stirdivant			
ACKNOWLEDGEMENT			
State of North Carolina			
County of	) s.s.: )		
On this day ofknown and known by me to be the seme perso	, 2013 personally appeared before me Steven M. Stirdivant, to me in described in and who executed the foregoing instrument, and a of his (her) own free will for the purpose set forth.		
(Seal)			
	Notary Public		

Page 4 of 5
Computer Generaled Template "Assignment-Merck Sharp & Ochma, Single Assignee Worldwide" (Assignment) Merck Sharp & Dohma Corp. 11/04/2010

Executed this day of	, 2013
Walter R. Strapps	
ACKNOWLEDGEMENT	
Commonwealth of Pennsylvania	}
County of Montgomery	)
On this day of and known by me to be the same person descrit he (she) executed the same, of his (her) own fre	_, 2013 personally appeared before me Walter R. Strapps, to me known sed in and who executed the foregoing instrument, and acknowledged the e will for the purpose set forth.
(Seal)	
	Notary Public

### WORLDWIDE ASSIGNMENT

WHEREAS, IWE,

(1) Duncan Brown, located at Berkeley, CA 94708,
 (2) James J. Cunningham, located at Devon, PA 19333,

(3) Marian Gindy. located at North Wales, PA 19454,
 (4) Victoria Pickering, located at San Mateo, CA 94403,

(5) Matthew G. Stanton, located at Mariton, NJ 08053,
 (6) Steven M. Stirdivant, located at Cary, NC 27713,

(7) Weller R. Strapps, located at Doylestown, PA 18901,

(hereinafter ASSIGNOR(S)), is/are the inventor(s) of the invention described in an application for Patents having the Attorney Docket Number indicated above and the following Title of the Invention:

RNA Interference Mediated Inhibition of Catenin (Cadherin-Associated Protein), Beta 1 (CTNNB1) Gene Expression Using Short Interfering Nucleic Acid (slNA)

and/or in the following application(s):

U.S. Provisional Application No. 61/370,064 filed on August 02, 2010; PCT international Application No. PCT/US2011/046178 having a filing date of August 02, 2011

WHEREAS I/WE covenant that the rights and property herein conveyed are free and clear of any encumbrance, and that I/we have the full right to convey the same as herein expressed.

WHEREAS, Merck Sharp & Dohme Corp., a corporation organized under the laws of the State of New Jersey, having an office at 126 East Lincoln Avenue, Rahway, New Jersey 07065, and its successors, assigns and legal representatives (hereinafter ASSIGNEE), is desirous of obtaining the entire right, title and interest in, to and under the invention disclosed in said application or applications;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I/we, said ASSIGNOR(S), do each hereby sell, assign and transfer or confirm the grant and assignment to said ASSIGNEE my/our entire right, title and interest in all countries of the world in and to my/our invention described in said application for Patents, in and to the right to file patent applications in the name of ASSIGNEE, its designes, or in any or all of our names, at its election, on the aforesaid invention in all countries of the world, together with all rights of priority in the aforesaid countries deriving from the above-identified application for Patents under the International Convention for the Protection of Industrial Property, under the Inter-American Convention relating to Inventions, Patents, Designs and Industrial Models and under any other international arrangement relating to patents or intellectual property, in and to any and all Letters Patent that are granted from the aforesaid application for Patents, in and to any applications claiming priority benefits to a provisional patent application or other applications filed on said invention, and in and to any continuations, divisions, reexaminations, reissues, renewals and extensions thereof of any of said Letters Patent, the same to be held and enjoyed by said ASSIGNEE, to the full ends of the terms for which all Letters Patent therefore may be granted, as fully and entirely as the same would have been held and enjoyed by us if this assignment and sale had not been made.

AND INVE HEREBY covenant and agree that we will at any time, upon the request and at the expense of ASSIGNEE, without further compensation or charge to said ASSIGNEE, execute and deliver any and all documents that may be necessary or desirable to perfect the title to the foregoing invention, patent applications, and Letters Patent and continuations, divisions, reexaminations, releasues, renewals and extensions thereof in the name of ASSIGNEE, including the execution and procurement of any and all further documents evidencing this assignment and sale as may be necessary or desirable for recording the same in the Patent Office of any country concerned, and will make all rightful oaths and declarations and do all lawful acts requisite for procuring the same or for aiding therein.

I/WE HEREBY authorize ASSIGNEE to insert in this instrument the Application Number(s) and the filing date(s) of said application for Patents when officially notified thereof.

This document may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, but all such components shall together constitute but one and the same document.

Computer Generated Tempiste "Assignment-Merck Sharp & Dohme, Single Assignee Worldwide" (Assignment) Merck Sharp & Dohme Corp., 11/04/2010

Executed this day of	, 2013
Duncan Brown	
ACKNOWLEDGEMENT	
State of California	) }s.s.}.
County of Alameda	
basis of satisfactory evidence to be the person v	_, 2013 personally appeared <b>Duncan Brown,</b> who proved to me on the whose name is subscribed to within instrument and acknowledged to me that and that by his signature on the instrument in person, or the entity upon instrument.
· ·	under the laws of the State of California that the foregoing paragraph is true
and correct.	
WITNESS my hand and official seal,	
(Seal)	
	Notary Public
Executed this 30 day of Garana angu-	, 2013
James J. Cunningham	
ACKNOWLEDGEMENT	
Commonwealth of Pennsylvania	) }s.s.:
Country of May Conserve	2013 personally appeared before me James J. Cunningham, to me
known, and known by me to be the same persiti	2-2013 personally appeared before me James J. Cunningham, to me in described in and who executed the foregoing instrument, and , of his (her) own free will for the purpose set forth.
(Seal)	And Ching St. 200 ME NINGY LVANIA  Stratist Sess  (Macyorie M. Dennistt, Notarry Public  Uppits Swynedd Trop., Montgomery County  Phy Commission Explans Jan. 24, 2015  MINISTER, PERFORMENTA ASSOCIATION OF RUTARIES

Page 2 of 5
Computer Generated Template "Assignment-Merck Sharp & Dohme, Single Assignee Worldwide" (Assignment) Merck Sharp & Dohme Corp., 11/04/2010

Executed this <u>-27</u> day of	, 2013	
<u> </u>		
Marlay Gindy		
ACKNOWLEDGEMENT		
Commonwealth of Pennsylvania	)	
County of Montgomery	) s.s.: )	
On this day of the Little known by me to be the same person desse (she) executed the same, of his (her) own	z, 2013 per ibed in and who s free will for the pu	senally appeared before me Marian Gindy, to me known, ar executed the foregoing instrument, and acknowledged that he erpose set forth.
(Seal)	_2	Notary Public COMMONWEALTH OF PENNSYLVANIA
Executed this day of	, , 2013	Noterial Seal  Marjorie M. Bennett, Notary Public  Upper Gaymod Tap., Montgomery County My Commission Explans Jan. 24, 2015  MSMBER, PENESYLVANIA ASSECTATION OF NOTABLES
Victoria Pickering		
ACKNOWLEDGEMENT		
State of California	)	
County of San Mateo	) s.s.:	
On this day of and known by me to be the same person d he (she) executed the same, of his (her) or	lescribed in and v	rsonally appeared before me Victoria Pickering, to me known one country of the foregoing instrument, and acknowledged to purpose set forth.
(Seai)		
	;A	Notary Public

Page 3 of 5
Computer Generated Tempiste "Assignment-Merck Sharp & Oohme, Single Assignee Worldwide" (Assignment) Merck Sharp & Oohme Corp. 11/04/2010

Executed this <u>A</u> day of <u>Quarted</u>	ريداني, 2013		
Executed this <u>Al</u> day of <u>Sand</u>			
Matthew G. Stanton			
ACKNOWLEDGEMENT			
Commonwealth of Pennsylvania	)		
County of Montgomery On this 2H day of January	) s.s.: ) & 4,4, 2013 perso	onally appeared before me Matthew G. Stanton,	to me
known, and known by me to be the same acknowledged that he (she) executed the	person described in	and who executed the foregoing instrument, and	
(Seal)	20,	arjain noble	nnegarje!
Executed this day of		Notary Public  COMMONWEALTH OF PENNSYLVANIA  Rotarial Seel  Marjorie M. Bennett, Notary Public  upper Gwynedd Twp., Motgressry County pry Commission Expires Ian. 24, 2015  MEMISE, PRINSYLVANIA SCOCIATER OF ROTARIES	
Steven M. Stirdivant			
ACKNOWLEDGEMENT			
State of North Carolina	l m m ·		
County of	) s.s.: )		
On this day of known, and known by me to be the same acknowledged that he (she) executed the	person described in	onally appeared before me Steven M. Stirdivant, and who executed the foregoing instrument, and own free will for the purpose set forth.	to me
(Seal)			
		Notary Public	

Page 4 of 5
Computer Generated Templete "Assignment-Merck Sharp & Dohme, Single Assignse Worldwide" (Assignment) Merck Sharp & Cohme Corp., 11/04/2018

Walter R. Strapps

ACKNOWLEDGEMENT

Commonwealth of Pennsylvania

38.8.

County of Montgomery

On this 24 day of 2013 personally appeared before me Walter R. Strapps, to me known, and known by me to be the same personal excribed in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

COMMONWEALTH OF PENNSYLVANIA

Marjoris M. Branett, Notary Public
Marjoris M. Branett, Notary Public
Upper Gwynedd Twp., Montgomery Cranity
My Commission Expires 3an. 24, 2015
WY THE STATE OF THE STA

#### WORLDWIDE ASSIGNMENT

WHEREAS, IME,

(1) Duncan Brown, located at Berkeley, CA 94708,

(2) James J. Cunningham, located at Devon, PA 19333,

(3) Marian Gindy, located at North Wales, PA 19454.

(4) Victoria Pickering, located at San Mateo, CA 94403,

(5) Matthew G. Stanton, located at Marlton, NJ 08053, (6) Steven M. Stirdivant, located at Cary, NC 27713,

(7) Walter R. Strapps, located at Doylestown, PA 18901,

(hereinafter ASSIGNOR(S)), is/are the inventor(s) of the invention described in an application for Patents having the Attorney Docket Number indicated above and the following Title of the invention:

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and/or in the following application(s):

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NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I/wa, said ASSIGNOR(S), do each hereby sell, assign and transfer or confirm the grant and assignment to said ASSIGNEE my/our entire right, title and interest in all countries of the world in and to my/our invention described in said application for Patents, in and to the right to file patent applications in the name of ASSIGNEE, its designee, or in any or all of our names, at its election, on the aforesaid invention in all countries of the world, together with all rights of priority in the aforesaid countries deriving from the above-identified application for Patents under the International Convention for the Protection of Industrial Property, under the Inter-American Convention relating to Inventions, Patents, Designs and Industrial Models and under any other international arrangement relating to patents or intellectual property, in and to any and all Letters Patent that are granted from the aforesaid application for Patents, in and to any applications claiming priority benefits to a provisional patent application or other applications filed on said invention, and in and to any continuations, divisions, reexaminations, releasues, renewals and extensions thereof of any of said Letters Patent, the same to be held and enjoyed by said ASSIGNEE, to the full ends of the terms for which all Letters Patent therefore may be granted, as fully and entirely as the same would have been held and enjoyed by us if this assignment and sale had not been made.

AND INVE HEREBY covenant and agree that we will at any time, upon the request and at the expense of ASSIGNEE, without further compensation or charge to said ASSIGNEE, execute and deliver any and all documents that may be necessary or desirable to perfect the title to the foregoing invention, patent applications, and Letters Patent and continuations, divisions, reexaminations, relessues, renewals and extensions thereof in the name of ASSIGNEE, including the execution and procurement of any and all further documents evidencing this assignment and sale as may be necessary or desirable for recording the same in the Patent Office of any country concerned, and will make all rightful oaths and declarations and do all lawful acts requisite for procuring the same or for aiding therein.

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Computer Camerated Template "Assignment-Merck Sharp & Dohme, Single Assignes Workfulds" (Assignment) Merck Sharp & Dohme Corp. 11/04/2010

Executed this day of	, 2013
Duncan Brown	
ACKNOWLEDGEMENT	
State of California	<b>)</b>
County of Alameda	) s.s.: )
basis of satisfactory evidence to be the per he executed the same in his authority capa behalf of which the person acted, executed I certify under PENALTY OF PER.	
and correct.	
WITNESS my hand and official seal,	
(Seal)	
	Notary Public
Executed this day of	
James J. Cunningham	maniminum :
ACKNOWLEDGEMENT	
Commonwealth of Pennsylvania	<b>)</b>
County of	) \$.\$.: )
On thisday of	, 2013 personally appeared before me James J. Cunningham, to me berson described in and who executed the foregoing instrument, and same, of his (her) own free will for the purpose set forth.
(Seal)	
	Notary Public

Page 2 of 5
Computer Generated Template "Assignment-Merck Sharp & Dohme, Single Assignae Worldwide" (Assignment) Merck Sharp & Dohme Corp., 11/04/2010

Executed this day of	, 2013
Marian Gindy	
ACKNOWLEDGEMENT	
Commonwealth of Pennsylvania	) ) s.s.:
County of Montgomery	)
On this day of known by me to be the same person described in (she) executed the same, of his (her) own free w	, 2013 personally appeared before me Marlan Gindy, to me known, and n and who executed the foregoing instrument, and acknowledged that he lill for the purpose set forth.
(Seal)	
	Notary Public
Executed this <u>30</u> day of <u>January</u> V. Pickerical  Victoria Pickering	, 2013
ACKNOWLEDGEMENT	
State of California	) ) s.s.:
County of San Mateg	)
On this 30 day of 3011 CVY and known by me to be the same person describe (she) executed the same, of his (her) own fre	, 2013 personally appeared before me Victoria Pickering, to me known, bed in and who executed the foregoing instrument, and acknowledged that se will for the purpose set forth.
(Seai)	Daloha Litel  Notary Public
DAKSHA PATEL E COMM. \$2001802 m Roley Public California SAN MATED COUNTY Ny Comm. Exp. DEC. 22, 2016	

Executed this day of	, 2013
Matthew G. Stanton	•••••
ACKNOWLEDGEMENT	
Commonwealth of Pennsylvania	) s.s.: )
County of Montgomery	
On this day of known, and known by me to be the same pers acknowledged that he (she) executed the sam	, 2013 personally appeared before me <b>Matthew G. Stanton</b> , to me on described in and who executed the foregoing instrument, and e, of his (her) own free will for the purpose set forth.
(Seal)	
	Notary Public
Executed this day of  Steven M. Stirdivant	, 2013
ACKNOWLEDGEMENT	
State of North Carolina  County of	<b>3 s.s.</b> :
On thisday of known, and known by me to be the same pers acknowledged that he (she) executed the san	, 2013 personally appeared before me Steven M. Stirdivant, to me son described in and who executed the foregoing instrument, and se, of his (her) own free will for the purpose set forth.
(Seal)	
	Notery Public

Page 4 of 5
Computer Generated Tempiste "Assignment-Merck Sharp & Dohms. Single Assignee Worldwide" (Assignment) Merck Sharp & Dohms Corp., 11/04/2010

Executed this day of	, , 2013
Walter R. Strapps	
	Ä.
ACKNOWLEDGEMENT	
Commonwealth of Pennsylvania	) s.s.:
County of Montgomery	\$
On this day of and known by me to be the same person descri- he (she) executed the same, of his (her) own fre	, 2013 personally appeared before me Walter R. Strapps, to me known bed in and who executed the foregoing instrument, and acknowledged the se will for the purpose set forth.
(Seal)	
	Notary Public

#### WORLDWIDE ASSIGNMENT

WHEREAS, IWE.

(1) Duncan Brown, located at Berkeley, CA 94708, (2) James J. Cunningham, located at Devon, PA 19333.

(2) James J. Cunningnam, located at Devon, PA 1833.
(3) Marian Gindy, located at North Wales, PA 18454,

(4) Victoria Pickering, located at San Mateo, CA 94403,

(5) Matthew G. Stanton, located at Mariton, NJ 08053, (6) Steven M. Stirdivant, located at Cary, NC 27713,

(7) Walter R. Strapps, located at Doylestown, PA 18901,

(hereinafter ASSIGNOR(S)), is/are the inventor(s) of the invention described in an application for Patents having the Attorney Docket Number indicated above and the following Title of the invention:

RNA Interference Mediated Inhibition of Catenin (Cadherin-Associated Protein), Beta 1 (CTNNB1) Gene Expression Using Short Interfering Nucleic Acid (sINA)

and/or in the following application(s):

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WHEREAS, Merck Sharp & Dohme Corp., a corporation organized under the laws of the State of New Jersey, having an office at 126 East Lincoln Avenue, Rahway, New Jersey 07065, and its successors, assigns and legal representatives (hereinafter ASSIGNEE), is desirous of obtaining the entire right, title and interest in, to and under the invention disclosed in said application or applications;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I/we, said ASSIGNOR(S), do each hereby sell, assign and transfer or confirm the grant and assignment to said ASSIGNEE my/our entire right, title and interest in all countries of the world in and to my/our invention described in said application for Patents, in and to the right to file patent applications in the name of ASSIGNEE, its designee, or in any or all of our names, at its election, on the aforesaid invention in all countries of the world, together with all rights of priority in the aforesaid countries deriving from the above-identified application for Patents under the International Convention for the Protection of Industrial Property, under the Inter-American Convention relating to Inventions, Patents, Designs and Industrial Models and under any other international arrangement relating to patents or intellectual property, in and to any and all Letters Patent that are granted from the aforesaid application for Patents, in and to any applications claiming priority benefits to a provisional patent application or other applications filled on said invention, and in and to any continuations, divisions, reexaminations, reissues, renewals and extensions thereof of any of said Letters Patent, the same to be held and enjoyed by said ASSIGNEE, to the full ends of the terms for which all Letters Patent therefore may be granted, as fully and entirely as the same would have been held and enjoyed by us if this assignment and sale had not been made.

AND INVE HEREBY covenant and agree that we will at any time, upon the request and at the expense of ASSIGNEE, without further compensation or charge to said ASSIGNEE, execute and deliver any and all documents that may be necessary or desirable to perfect the title to the foregoing invention, patent applications, and Letters Patent and continuations, divisions, reexaminations, reissues, renewals and extensions thereof in the name of ASSIGNEE, including the execution and procurement of any and all further documents evidencing this assignment and sale as may be necessary or desirable for recording the same in the Patent Office of any country concerned, and will make all rightful oaths and declarations and do all lawful acts requisite for procuring the same or for aiding therein.

I/WE HEREBY authorize ASSIGNEE to insert in this instrument the Application Number(s) and the filing date(s) of said application for Patents when officially notified thereof.

This document may be executed in any number of counterparts, each of which so executed shall be deamed to be an original, but all such components shall together constitute but one and the same document.

Computer Generated Template "Assignment-Merck Sherp & Dohme. Single Assignse Worldwide" (Assignment) Merck Sherp & Dohme Corp. 11/04/2010

Executed this day of	
Duncan Brown	
ACKNOWLEDGEMENT	
State of California	)
County of Alameda	) s.s.:
basis of satisfactory evidence to be the pe he executed the same in his authority capa behalf of which the person acted, executed	, 2013 personally appeared Duncan Brown, who proved to me on the rean whose name is subscribed to within instrument and acknowledged to me that acity, and that by his signature on the instrument in person, or the entity upon d the instrument.  JURY under the laws of the State of California that the foregoing paragraph is true
and correct.	20 miles 22 miles 22 miles and 24 miles and annual miles miles miles and annual and annual an
WITNESS my hand and official seal,	
(Seal)	4
	Notary Public
Executed this day of	
James J. Cunningham	
ACKNOWLEDGEMENT	
Commonwealth of Pennsylvenia	
County of	)
On this day of known, and known by me to be the same acknowledged that he (she) executed the	, 2013 personally appeared before me James J. Cunningham, to me person described in and who executed the foregoing instrument, and same, of his (her) own free will for the purpose set forth.
(Seal)	
	Notary Public

Page 2 of 5 Computer Generated Template "Assignment-Merck Sherp & Dohme, Single Assignes Worldwids" (Assignment) Merck Sharp & Dohme Corp. 11/04/2010

Executed this day of	, 2013
Marian Gindy	
ACKNOWLEDGEMENT	
Commonwealth of Pennsylvania	} \$s.s.:
County of Montgomery	\$ 50.00 m
On this day of known by me to be the same person described it (she) executed the same, of his (her) own free w	_, 2013 personally appeared before me Marian Gindy, to me known, and n and who executed the foregoing instrument, and acknowledged that he fill for the purpose set forth.
(Seai)	
. ,	Notary Public
Executed this day of	, 2013
Victoria Pickering	
ACKNOWLEDGEMENT	
State of California	) ) s.s.::
County of San Meteo	)
On this day of and known by me to be the same person described (she) executed the same, of his (her) own fre	, 2013 personally appeared before me Victoris Pickering, to me known bed in and who executed the foregoing instrument, and acknowledged that be will for the purpose set forth.
(Seal)	
	Notary Public

Page 3 of 5
Computer Generaled Template "Assignment-Merck Sharp & Dohme, Single Assignee Worldwide" (Assignment) Merck Sharp & Dohme Corp. 11/04/2010

Executed this day of	, 2013
Matthew G. Stanton	
ACKNOWLEDGEMENT	
Commonwealth of Pennsylvania  County of Montgomery	) \$.5.: ) 3042 paragraph appeared before the Matthew C. Stanton, in the
known, and known by me to be the same person acknowledged that he (she) executed the same	, 2013 personally appeared before me Matthew G. Stanton, to me in described in and who executed the foregoing instrument, and , of his (her) own free will for the purpose set forth.
(Seal)	
	Notary Public
Executed this <u>22</u> day of <u>Juneary</u> Steven M. Stirdivant	_, 2013
ACKNOWLEDGEMENT	
State of North Carolina  County of	) s.s.: )
<ul> <li>known, and known by me to be the same perso</li> </ul>	2013 personally appeared before me Steven M. Stirdivant, to me in described in and who executed the foregoing instrument, and i, of his (her) own free will for the purpose set forth.
SURVILLA  SURVIL	Notery Public

Page 4 of 5
Computer Cenerated Template "Assignment-Merck Sharp & Dohne, Single Assignes Worldwide" (Assignment) Merck Sharp & Dohne Corp., 11/04/2010

Executed this day of	, 2013			
Walter R. Strapps				
ACKNOWLEDGEMENT				
Commonwealth of Pennsylvania	)	ž.		
County of Montgomery	) s.s.: }			
On this day of and known by me to be the same person des he (she) executed the same, of his (her) own	, 2013 pe cribed in and v free will for th	rsonally appeared before who executed the forego e purpose set forth.	e me Walter R. Stri oing instrument, and	apps, to me knowr acknowledged the
(Seal)				
		Notary Public	······································	

PATENT REEL: 032600 FRAME: 0974

**RECORDED: 04/04/2014**