

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT2991402

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
KEVIN FRANKOWSKI	08/04/2014
SAMARJIT PATNAIK	06/19/2014
SUI HUANG	07/29/2014
JUAN JOSE MARUGAN	06/19/2014
JOHN NORTON	07/30/2014
FRANK J. SCHOENEN	08/04/2014
NOEL TERRENCE SOUTHALL	06/19/2014
STEVEN TITUS	06/19/2014
WEI ZHENG	06/19/2014
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	The United States of America, as represented by the Secretary, Department of Health and Human Services
<b>Street Address:</b>	Office of Technology Transfer, National Institutes of Health
<b>Internal Address:</b>	6011 Executive Boulevard, Suite 325, MSC 7660
<b>City:</b>	Bethesda
<b>State/Country:</b>	MARYLAND
<b>Postal Code:</b>	20892-7660
<b>Name:</b>	UNIVERSITY OF KANSAS
<b>Street Address:</b>	245 STRONG HALL
<b>Internal Address:</b>	1450 JAYHAWK BOULEVARD
<b>City:</b>	LAWRENCE
<b>State/Country:</b>	KANSAS
<b>Postal Code:</b>	66045-7568
<b>Name:</b>	NORTHWESTERN UNIVERSITY, AN ILLINOIS NOT-FOR-PROFIT CORPORATION
<b>Street Address:</b>	633 CLARK STREET
<b>City:</b>	EVANSTON
<b>State/Country:</b>	ILLINOIS
<b>Postal Code:</b>	60208
<b>PROPERTY NUMBERS Total: 1</b>	
<b>PATENT</b>	

<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14364759

**CORRESPONDENCE DATA**

**Fax Number:** (312)616-5700  
*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:** 312-616-5600  
**Email:** email@leydig.com  
**Correspondent Name:** JOHN KILYK, JR.  
**Address Line 1:** TWO PRUDENTIAL PLAZA, SUITE 4900  
**Address Line 2:** 180 NORTH STETSON AVENUE  
**Address Line 4:** CHICAGO, ILLINOIS 60601-6731

<b>ATTORNEY DOCKET NUMBER:</b>	716907/EKM
<b>NAME OF SUBMITTER:</b>	JOHN KILYK, JR.
<b>SIGNATURE:</b>	/John Kilyk, Jr./
<b>DATE SIGNED:</b>	08/21/2014

**Total Attachments: 13**  
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Leydig, Voit & Mayer, Ltd.  
Two Prudential Plaza, Suite 4900  
180 North Stetson Avenue  
Chicago, Illinois 60601-6731

## ASSIGNMENT

**WHEREAS, WE,**

(1) Kevin Frankowski

(2) Frank J. Schoenen

hereinafter referred to as Assignor, have co-invented a certain invention entitled:

### **COMPOUNDS AND METHODS FOR THE PREVENTION AND TREATMENT OF TUMOR METASTASIS AND TUMORIGENESIS**

for which invention we have executed an application (non-provisional) for a U.S. patent, which was filed on June 12, 2014, under U.S. Application No. 14/364,759, and

**WHEREAS,** we are some of the inventors named in the patent application; and

**WHEREAS,** University of Kansas, of 245 Strong Hall, 1450 Jayhawk Boulevard, Lawrence, Kansas 66045-7568, hereinafter referred to as Assignee, is desirous of acquiring our entire domestic and foreign right, title, and interest in and under the invention described in the patent application.

**NOW, THEREFORE,** for good and valuable considerations, the receipt and sufficiency of which are hereby acknowledged, we assign and transfer to the Assignee and the Assignee's legal representatives, successors and assigns our full and exclusive rights in and to the invention in the U.S. and every foreign country and our entire right, title, and interest in and to the patent application and other such applications (e.g., provisional applications, non-provisional applications, continuations, continuations-in-part, divisionals, reissues, reexaminations, National phase applications, including petty patent applications, and utility model applications) that may be filed in the United States and every foreign country on the invention, and the patents, extensions, or derivations thereof, both foreign and domestic, that may issue thereon, and we do hereby authorize and request the Commissioner of Patents to issue U.S. patents to the above-mentioned Assignee agreeably with the terms of this assignment document.

**WE HEREBY AUTHORIZE** the Assignee to insert in this assignment document the filing date and application number of the application if the date and number are unavailable at the time this document is executed.

**UPON SAID CONSIDERATION,** we convey to the Assignee the right to make application in its own behalf for protection of the invention in the U.S. and countries foreign to the U.S. and to claim under the Patent Cooperation Treaty, the International Convention and/or other international arrangement for any such application the date of the U.S. application (or any other application on the invention) to gain priority with respect to other applications.

In re Appln. of Frankowski et al.  
Attorney Docket No. 716907

WE DO HEREBY COVENANT and agree with the Assignee that we will not execute any writing or do any act whatsoever conflicting with the terms of this assignment document set forth herein, and that we will at any time upon request, without further or additional consideration, but at the expense of the Assignee, execute such additional assignments and other writings and do such additional acts as the Assignee may deem necessary or desirable to perfect the Assignee's enjoyment of this assignment, and render all necessary assistance in making application for and obtaining original, continuation, continuation-in-part, divisional, reissued, reexamined, and National phase patents of the U.S. or of any and all foreign countries on the invention, and in enforcing any rights or choses in action accruing as a result of such applications or patents, and by executing statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of, the assigns and legal representatives of all parties hereto.

IN WITNESS WHEREOF, we have hereunder set our hands on the dates shown below.

Date 4 Aug 14

Kevin Frankowski  
Kevin Frankowski

STATE OF Kansas )

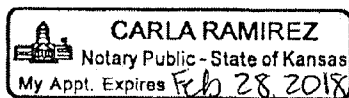
COUNTY OF Douglas )

On this 4th day of August, 2014, before me, a Notary Public in and for said county, appeared Kevin Frankowski, who is personally known to me to be the same person whose name is subscribed to the foregoing assignment document, and acknowledged that he/she signed and delivered the document as his/her free and voluntary act for the uses and purposes therein set forth.

Carla Ramirez  
Notary Public

{SEAL}

My Commission Expires: February 28, 2018



In re Appln. of Frankowski et al.  
Attorney Docket No. 716907

Date Aug. 4, 2014

Frank J. Schoenen  
Frank J. Schoenen

STATE OF Kansas )

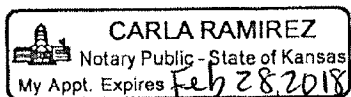
COUNTY OF Douglas )

On this 4th day of August, 2014, before me, a Notary Public in and for said county, appeared Frank J. Schoenen, who is personally known to me to be the same person whose name is subscribed to the foregoing assignment document, and acknowledged that he/she signed and delivered the document as his/her free and voluntary act for the uses and purposes therein set forth.

Carla Ramirez  
Notary Public

{SEAL}

My Commission Expires: February 28, 2018



**ASSIGNMENT FOR NIH/FDA/CDC INVENTIONS AIA  
(NIH OR FDA OR CDC AND LEIDOS BIOMEDICAL CO-INVENTORS ONLY)**

**WHEREAS**, we,

1. Samarjit Patnaik, Juan Jose Marugan, Noel Terrence Southall, Steven Titus, and Wei Zheng, employees of the National Institutes of Health,

each a/a component of the United States Department of Health and Human Services having an address at the Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, MSC 7660, Bethesda, MD 20892-7660, and

have made certain inventions as described and claimed in:

1. U.S. Patent Application No. 14/364,759, filed 6/12/2014, and which is entitled "COMPOUNDS AND METHODS FOR THE PREVENTION AND TREATMENT OF TUMOR METASTASIS AND TUMORIGENESIS"

**WHEREAS**, we are some of the inventors named in **The Patent Application(s)**; and

**WHEREAS**, the inventions described and claimed in **The Patent Application(s)** were made under conditions such as to entitle **THE UNITED STATES OF AMERICA, as represented by the Secretary, Department of Health and Human Services** [hereinafter **THE GOVERNMENT**] under Executive Order 10096 and its amendments, 35 USC §§200-202, §§206-207, and §210 and 37 CFR Part 501 and 37 CFR Part 401 to our entire right, title, and interest in such inventions; and

**WHEREAS, THE GOVERNMENT** is desirous of acquiring our domestic and foreign right, title, and interest in the inventions described and claimed in **The Patent Application(s)**; and

**NOW, THEREFORE**, having the legal obligation to assign our right, title and interest in the inventions described and claimed in **The Patent Application(s)** to **THE GOVERNMENT**, having a place of business at the Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, MSC 7660, Bethesda, MD 20892-7660 and for consideration, the receipt and sufficiency of which are hereby acknowledged, we hereby assign and transfer to **THE GOVERNMENT**:

our entire right, title, and interest in and to any and all inventions described and claimed in **The Patent Applications** and any and all Letters Patent(s) which may be granted thereon, and any and all continuations, divisions, reissues or extensions thereof; and

all rights to claim priority on the basis of **The Patent Application(s)** including but not limited to applications filed through the provisions of the Patent Cooperation Treaty ("PCT Applications"); and

all applications for Letters Patent(s) that may be filed for any and all inventions described and claimed in **The Patent Application(s)** that may be filed in any foreign country and all Letters Patents that may be granted thereon in any foreign country and all extensions, renewals, and reissues thereof; and

any and all such Letters Patents as may be granted in the United States or any foreign country to be held by **THE GOVERNMENT** to the end of the term for which the same would have been held by the inventors had this assignment not been made.

we further agree to make, execute, and deliver to **THE GOVERNMENT**, upon request, any and all papers, documents, affidavits, or other instruments that may be necessary in the prosecution of any application or applications for improvements or reissues of Letters Patent, and to assist **THE GOVERNMENT** in every way as may be requested in protecting said invention.

IN WITNESS WHEREOF we subscribe our hands and seals on the dates shown below:

<b>Inventor 2:</b>	
<u>June 19 2014</u> Date	<u>Samar Patnaik</u> Samarjit Patnaik
County of <u>Montgomery County</u> State of _____	<div style="border: 1px solid black; padding: 5px; display: inline-block;">CATHERINE ANN ANZICK Notary Public-Maryland My Commission Expires July 06, 2014</div> Ss: _____
Subscribed and sworn to before me this <u>19</u> day of <u>June 2014</u> .	
[Seal]	<u>C. Anzick</u> Notary Public for <u>Maryland</u> My Commission Expires: <u>7.6.14</u>

Inventor 4:

June 19 2014  
Date

*[Signature]*  
Juan José Marugan

County of CATHERINE ANN ANZICK Ss:  
Notary Public-Maryland  
Montgomery County  
My Commission Expires  
State of July 06, 2014

Subscribed and sworn to before me this 19 day of June 2014.

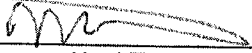
[Seal]

*C. Anzick*  
Notary Public for Maryland  
My Commission Expires: 7.6.14



Inventor 7:

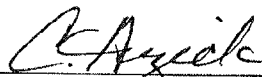
6/19/14  
Date

  
Noel Terrence Southall

County of CATHERINE ANN ANZICK  
Notary Public-Maryland Ss:  
Montgomery County  
State of My Commission Expires  
July 06, 2014

Subscribed and sworn to before me this 19 day of June 2014.

[Seal]

  
Notary Public for Maryland  
My Commission Expires: 7.6.14

Inventor 8:

6-19-2014

Date

SA Titus

Steven Titus

County of

CATHERINE ANN ANZICK  
Notary Public-Maryland  
Montgomery County  
My Commission Expires  
July 06, 2014

SS:

State of

Subscribed and sworn to before me this 19 day of June 2014

[Seal]

C. Anzick

Notary Public for

Maryland

My Commission Expires:

7.6.14

Inventor 9:

6/19/14

Date

Wei Zheng

Wei Zheng

County of

CATHERINE ANN ANZICK  
Notary Public-Maryland  
Montgomery County  
My Commission Expires  
July 06, 2014

Ss

State of

Subscribed and sworn to before me this 19 day of June 2014

[Seal]

C. Anzick

Notary Public for

Maryland

My Commission Expires:

7.6.14

**ASSIGNMENT**

Serial No: 14/364,759  
Filing Date: June 12, 2014  
Title of U.S. Patent Application: **Compounds and Methods for the Prevention and Treatment of Tumor Metastasis and Tumorigenesis**

For good and valuable consideration, the receipt and sufficiency of which are hereby agreed, each of the undersigned hereby assigns to Northwestern University, an Illinois not-for-profit corporation, having a place of business at 633 Clark Street, Evanston, Illinois 60208 and its successors and assigns ("Assignee") the entire right, title and interest in and to the inventions of such undersigned disclosed in the application listed above, and in any and all other applications anywhere in the world which the undersigned may file and/or be named as an inventor of, solely or jointly, on said inventions, in any and all patents which may be obtained on any of said applications and in any and all reissues, reexaminations, supplemental examinations, inter partes reviews, oppositions, post-grant reviews, supplementary protection certificates and/or extensions thereof, including without limitation, the right to bring suit and to claim and retain all damages and/or seek other remedies for the past, present and future infringement of any of the foregoing, the right of priority, including without limitation to claim priority benefit of or to said patent applications, and request the Commissioner for Patents in the United States and similar authorities outside the United States to issue said patents to and in the name of the Assignee.

Each of the undersigned states that the application listed above is or was made or authorized to be made by him or her. Each of the undersigned believes himself or herself to be the original inventor or a joint inventor with another undersigned of a claimed invention in the application listed above. Each of the undersigned acknowledges that any willful false statement made by him or her in this paragraph is punishable under 18 U.S.C. §1001 by fine or imprisonment of not more than five years, or both.

Except in favor of Assignee, each of the undersigned warrants that: (i) he or she is the owner of all its rights, titles and interests herein assigned and has the right to make this unconditional and irrevocable assignment to Assignee without obtaining any approval or permission of a third party; and (ii) there are no outstanding encumbrances, liens, prior assignments, licenses, or other obligations or restrictions on the rights, titles and interests herein assigned.

Upon the request of Assignee and at no expense to the undersigned, each of the undersigned hereby agrees to execute any and all applications on said inventions, including without limitation for the reissue, reexamination, supplementary protection certificate or extension thereof and any oath, declaration or affidavit relating thereto that said Assignee may deem necessary or expedient, and to cooperate to the best of the ability of the undersigned with and perform any and all affirmative acts requested by Assignee to prepare, file, prosecute, maintain, defend, enforce and vest in Assignee the rights, titles and interests assigned herein, including without limitation, preparing and executing statements and giving and producing evidence in support thereof, whereby said rights, titles and interests will be held and enjoyed by said Assignee to the full end of the term for which said patents may be granted as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment had not been made.

ASSIGNEE: Northwestern University:

On behalf of Northwestern University, Assignee, the authorized signatory below, hereby confirms Assignee's acceptance of all rights, privileges, titles and interests conveyed by this Assignment.

Signature: Beverly R. Milligan Date: 7/31/2014  
Name: Beverly R. Milligan  
Title: Invention Specialist, Innovation and New Ventures Office (INVO)

Undersigned (ASSIGNORS)  
Sui Huang 7/29/2014  
Inventor Name: Sui Huang DATE

State of ILLINOIS  
County of USA-COOK <sup>SS.</sup>

On this 29 day of July, 2014, before me, a Notary Public in and for the County and State aforesaid, appeared, to me personally known to be the same person whose name is subscribed to the foregoing instrument, and acknowledged that he or she executed said instrument as his or her free and voluntary act and for the uses and purposes therein expressed.

Beverly Ruth Milligan  
NOTARY PUBLIC  
My Commission Expires: 5/21/2017

[NOTARY SEAL]



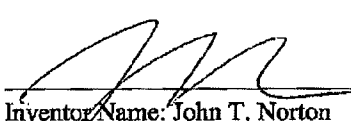
Attorney Docket No. Leydig 716907  
NU Reference No. 2013-142-03

Serial No: 14/364,759

Filing Date: June 12, 2014

Title of U.S. Patent Application: **Compounds and Methods for the Prevention and Treatment of Tumor Metastasis and Tumorigenesis**

Undersigned (ASSIGNORS) continued:

 7/30/14  
Inventor Name: John T. Norton DATE

State of \_\_\_\_\_ ss.

County of \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 2014, before me, a Notary Public in and for the County and State aforesaid, appeared, to me personally known to be the same person whose name is subscribed to the foregoing instrument, and acknowledged that he or she executed said instrument as his or her free and voluntary act and for the uses and purposes therein expressed.

CALIFORNIA ACKNOWLEDGMENT ATTACHED  
NOTARY PUBLIC

[NOTARY SEAL]

My Commission Expires: \_\_\_\_\_

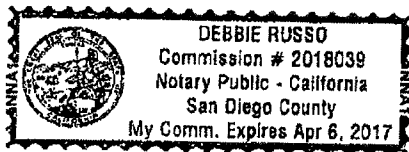
**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**  
**CIVIL CODE § 1189**

State of California

County of SAN DIEGO }

On JULY 30 2014 before me, DEBBIE RUSSO, NOTARY PUBLIC  
Date Here Insert Name and Title of the Officer

personally appeared JOHN T. NORTON  
Name(s) of Signer(s)



Place Notary Seal Above

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies); and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: Debbie Russo  
Signature of Notary Public

**OPTIONAL**

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

**Description of Attached Document**

Title or Type of Document: ASSIGNMENT Document Date: JUNE 12, 2014  
Number of Pages: 3 Signer(s) Other Than Named Above: BEVERLY R. MILLIGAN AND SUI HUANG

**Capacity(ies) Claimed by Signer(s)**

Signer's Name: \_\_\_\_\_  
☐ Corporate Officer — Title(s): \_\_\_\_\_  
☐ Partner — ☐ Limited ☐ General  
☐ Individual ☐ Attorney in Fact  
☐ Trustee ☐ Guardian or Conservator  
☐ Other: \_\_\_\_\_

Signer's Name: \_\_\_\_\_  
☐ Corporate Officer — Title(s): \_\_\_\_\_  
☐ Partner — ☐ Limited ☐ General  
☐ Individual ☐ Attorney in Fact  
☐ Trustee ☐ Guardian or Conservator  
☐ Other: \_\_\_\_\_

Signer Is Representing: \_\_\_\_\_

Signer Is Representing: \_\_\_\_\_