

PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:

NEW ASSIGNMENT

NATURE OF CONVEYANCE:

ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Indraneel GHOSH	11/18/2008
Cliff I STAINS	11/17/2008
Jason R. PORTER	11/26/2008
Benjamin JESTER	11/18/2008
Jennifer FURMAN	11/18/2008

RECEIVING PARTY DATA

Name:	The Arizona Board of Regents on Behalf of the University of Arizona
Street Address:	888 N. Euclid Avenue
Internal Address:	Room 204
City:	Tucson
State/Country:	ARIZONA
Postal Code:	85721

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12290778

CORRESPONDENCE DATA

Fax Number: (303)499-8089

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

Phone: (303)499-8080

Email: usptomail@greenwin.com

Correspondent Name: Greenlee, Winner and Sullivan, P.C.

Address Line 1: 4875 Pearl East Circle

Address Line 2: Suite 200

Address Line 4: Boulder, COLORADO 80301

NAME OF SUBMITTER:

Donna M. Ferber, Ph.D.

PATENT

500784498

REEL: 022275 FRAME: 0007

CH \$40.00 12290778

Total Attachments: 15

source=178-08_assignment_all_sigs_to_file#page1.tif
source=178-08_assignment_all_sigs_to_file#page2.tif
source=178-08_assignment_all_sigs_to_file#page3.tif
source=178-08_assignment_all_sigs_to_file#page4.tif
source=178-08_assignment_all_sigs_to_file#page5.tif
source=178-08_assignment_all_sigs_to_file#page6.tif
source=178-08_assignment_all_sigs_to_file#page7.tif
source=178-08_assignment_all_sigs_to_file#page8.tif
source=178-08_assignment_all_sigs_to_file#page9.tif
source=178-08_assignment_all_sigs_to_file#page10.tif
source=178-08_assignment_all_sigs_to_file#page11.tif
source=178-08_assignment_all_sigs_to_file#page12.tif
source=178-08_assignment_all_sigs_to_file#page13.tif
source=178-08_assignment_all_sigs_to_file#page14.tif
source=178-08_assignment_all_sigs_to_file#page15.tif

ASSIGNMENT

WHEREAS, WE:

1. **Indraneel GHOSH**, residing at 4400 N. Placita Gacela, Tucson, Arizona, 85718;
2. **Cliff I. STAINS**, residing at 1 Oak Grove Ave., Apartment 123, Melrose, Massachusetts, 02176 ;
3. **Jason R. PORTER**, residing at 2919 E. Toledo Place, Tucson, Arizona, 85716;
4. **Benjamin JESTER**, residing at 2919 E. Toledo Place, Tucson, Arizona, 85716;
5. **Jennifer FURMAN**, residing at 3033 E. 6th St., Apartment F11, Tucson, Arizona, 85716

(herein called "ASSIGNORS"), are the inventors of the invention entitled:

"CELL FREE METHODS FOR DETECTING PROTEIN-LIGAND BINDING";

for which the following patent application:

Application Type	Application Serial No.	Filing Date
United States Patent Application	12/290,778	November 3, 2008

was submitted or filed (collectively, the "LISTED APPLICATION");

AND WHEREAS, **The Arizona Board of Regents on Behalf of the University of Arizona** (herein called "ASSIGNEE"), an entity organized and existing under the laws of the State of Arizona, having a principal place of business at:

888 N. Euclid Avenue
Room 204
Tucson, Arizona, 85721,

is desirous of obtaining our entire right, title and interest in, to and under the said invention and the said application(s);

NOW, THEREFORE, in consideration of my contractual and other legal obligations, and other good and valuable consideration, the receipt of which is hereby acknowledged, I, a said ASSIGNOR, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, my entire right, title and interest in, to and under the said invention, and the said United States Application and all divisions, renewals, continuations and subsequent applications thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may

hereafter be filed for said invention in any country or countries foreign to the United States; together with the right to file such applications and the right to claim for the same the priority of said patent applications listed herein and applications thereof and therefrom under The International Union for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application and applications thereof and therefrom is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

AND I HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any official of any country or countries foreign to the United States whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument;

AND I HEREBY covenant and agree that I have full right to convey the entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith;

AND I HEREBY authorize the above-mentioned ASSIGNEE or its legal representative to insert in this instrument the filing date and serial number of said application(s) or any other information that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document;

AND I HEREBY further covenant and agree that I will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all continuing and subsequent applications, including divisional, reissue and foreign applications, make all rightful oaths, and generally cooperate and do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain, maintain, and enforce proper protection for said invention in any and all countries;

IN TESTIMONY WHEREOF, I hereunto set my hand and seal (if applicable) the day and year set opposite my signature.

GWS Ref. 178-08
Assignment

18th November 2008
Date

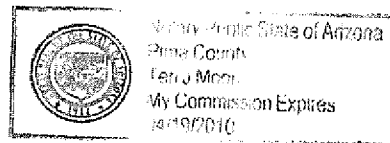
Indraneel Ghosh
Indraneel GHOSH

STATE OF ARIZONA)
) ss.
COUNTY OF Pima)

BEFORE ME, the undersigned authority, on this 18 day of November, 2008, personally appeared the above person, known to me to be the person whose name is subscribed to this instrument and who acknowledged to me that he executed the same of his own free will for the purposes and consideration herein expressed.

Date: November 18, 2008 Teri Moore
Notary Public

My Commission expires: 04/19/2010



Date Cliff I. STAINS

STATE OF _____)
) ss.
COUNTY OF _____)

BEFORE ME, the undersigned authority, on this ____ day of _____, 2008, personally appeared the above person, known to me to be the person whose name is subscribed to this instrument and who acknowledged to me that he executed the same of his own free will for the purposes and consideration herein expressed.

Date: _____
Notary Public

My Commission expires: _____

Additional Assignors on additional sheets: Yes

Date

Jason R. PORTER

STATE OF _____)
COUNTY OF _____) ss.

BEFORE ME, the undersigned authority, on this _____ day of _____, 2008, personally appeared the above person, known to me to be the person whose name is subscribed to this instrument and who acknowledged to me that he executed the same of his own free will for the purposes and consideration herein expressed.

Date:

Notary Public

My Commission expires:

November 18th, 2008

Date

BWA
Benjamin JESTER

STATE OF ARIZONA)
COUNTY OF Pima) ss.

BEFORE ME, the undersigned authority, on this 18 day of November, 2008, personally appeared the above person, known to me to be the person whose name is subscribed to this instrument and who acknowledged to me that he executed the same of his own free will for the purposes and consideration herein expressed.

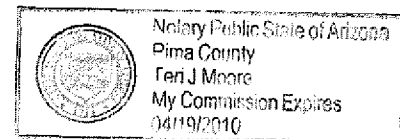
Date: November 18, 2008

Teri J. Moore

Notary Public

My Commission expires: 04/19/2010

Additional Assignors on additional sheets: Yes



GWS Ref. 178-08
Assignment

11/18/08
Date

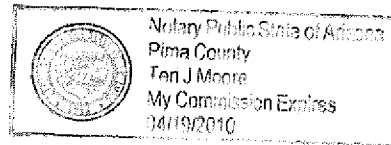
Jennifer L. Furman
Jennifer FURMAN

STATE OF ARIZONA)
COUNTY OF Pima) ss.

BEFORE ME, the undersigned authority, on this 18th day of November, 2008, personally appeared the above person, known to me to be the person whose name is subscribed to this instrument and who acknowledged to me that he executed the same of his own free will for the purposes and consideration herein expressed.

Date: November Ten J. Moore
Notary Public

My Commission expires: 04/19/2010



Additional Assignors on additional sheets: No

ASSIGNMENT

WHEREAS, WE:

1. **Indraneel GHOSH**, residing at 4400 N. Placita Gacela, Tucson, Arizona, 85718;
2. **Cliff I. STAINS**, residing at 1 Oak Grove Ave., Apartment 123, Melrose, Massachusetts, 02176 ;
3. **Jason R. PORTER**, residing at 2919 E. Toledo Place, Tucson, Arizona, 85716;
4. **Benjamin JESTER**, residing at 2919 E. Toledo Place, Tucson, Arizona, 85716;
5. **Jennifer FURMAN**, residing at 3033 E. 6th St., Apartment F11, Tucson, Arizona, 85716

(herein called "ASSIGNORS"), are the inventors of the invention entitled:

"CELL FREE METHODS FOR DETECTING PROTEIN-LIGAND BINDING";

for which the following patent application:

Application Type	Application Serial No.	Filing Date
United States Patent Application	12/290,778	November 3, 2008

was submitted or filed (collectively, the "LISTED APPLICATION");

AND WHEREAS, **The Arizona Board of Regents on Behalf of the University of Arizona** (herein called "ASSIGNEE"), an entity organized and existing under the laws of the State of Arizona, having a principal place of business at:

888 N. Euclid Avenue
Room 204
Tucson, Arizona, 85721,

is desirous of obtaining our entire right, title and interest in, to and under the said invention and the said application(s);

NOW, THEREFORE, in consideration of my contractual and other legal obligations, and other good and valuable consideration, the receipt of which is hereby acknowledged, I, a said ASSIGNOR, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, my entire right, title and interest in, to and under the said invention, and the said United States Application and all divisions, renewals, continuations and subsequent applications thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may

hereafter be filed for said invention in any country or countries foreign to the United States; together with the right to file such applications and the right to claim for the same the priority of said patent applications listed herein and applications thereof and therefrom under The International Union for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application and applications thereof and therefrom is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

AND I HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any official of any country or countries foreign to the United States whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument;

AND I HEREBY covenant and agree that I have full right to convey the entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith;

AND I HEREBY authorize the above-mentioned ASSIGNEE or its legal representative to insert in this instrument the filing date and serial number of said application(s) or any other information that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document;

AND I HEREBY further covenant and agree that I will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all continuing and subsequent applications, including divisional, reissue and foreign applications, make all rightful oaths, and generally cooperate and do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain, maintain, and enforce proper protection for said invention in any and all countries;

IN TESTIMONY WHEREOF, I hereunto set my hand and seal (if applicable) the day and year set opposite my signature.

Date

Indraneel GHOSH

STATE OF _____)
COUNTY OF _____) ss.

BEFORE ME, the undersigned authority, on this _____ day of _____, 2008, personally appeared the above person, known to me to be the person whose name is subscribed to this instrument and who acknowledged to me that he executed the same of his own free will for the purposes and consideration herein expressed.

Date: _____

Notary Public

My Commission expires: _____

11/17/08
Date

Cliff I. Stains
Cliff I. STAINS

STATE OF Massachusetts)
COUNTY OF Middlesex) ss.

BEFORE ME, the undersigned authority, on this 17 day of November, 2008, personally appeared the above person, known to me to be the person whose name is subscribed to this instrument and who acknowledged to me that he executed the same of his own free will for the purposes and consideration herein expressed.

Date: 11/17/08 Sara O'Finn
Notary Public

My Commission expires: March 12, 2015

Additional Assignors on additional sheets: Yes

Date _____ Jason R. PORTER

STATE OF _____)
) ss.
COUNTY OF _____)

BEFORE ME, the undersigned authority, on this _____ day of _____, 2008, personally appeared the above person, known to me to be the person whose name is subscribed to this instrument and who acknowledged to me that he executed the same of his own free will for the purposes and consideration herein expressed.

Date: _____
Notary Public

My Commission expires:

Date: Benjamin JESTER

STATE OF _____)
) ss.
COUNTY OF _____)

BEFORE ME, the undersigned authority, on this _____ day of _____, 2008, personally appeared the above person, known to me to be the person whose name is subscribed to this instrument and who acknowledged to me that he executed the same of his own free will for the purposes and consideration herein expressed.

Date: _____

Notary Public

My Commission expires: _____

Additional Assignors on additional sheets: Yes

Date _____

Jennifer FURMAN

STATE OF _____ }
COUNTY OF _____ } ss.

BEFORE ME, the undersigned authority, on this _____ day of _____, 2008, personally appeared the above person, known to me to be the person whose name is subscribed to this instrument and who acknowledged to me that he executed the same of his own free will for the purposes and consideration herein expressed.

Date: _____
Notary Public

My Commission expires: _____

Additional Assignors on additional sheets: No

ASSIGNMENT

WHEREAS, WE:

1. **Indraneel GHOSH**, residing at 4400 N. Placita Gacela, Tucson, Arizona, 85718;
2. **Cliff I. STAINS**, residing at 1 Oak Grove Ave., Apartment 123, Melrose, Massachusetts, 02176 ;
3. **Jason R. PORTER**, residing at 2919 E. Toledo Place, Tucson, Arizona, 85716;
4. **Benjamin JESTER**, residing at 2919 E. Toledo Place, Tucson, Arizona, 85716;
5. **Jennifer FURMAN**, residing at 3033 E. 6th St., Apartment F11, Tucson, Arizona, 85716

(herein called "ASSIGNORS"), are the inventors of the invention entitled:

"CELL FREE METHODS FOR DETECTING PROTEIN-LIGAND BINDING";

for which the following patent application:

Application Type	Application Serial No.	Filing Date
United States Patent Application	12/290,778	November 3, 2008

was submitted or filed (collectively, the "LISTED APPLICATION");

AND WHEREAS, **The Arizona Board of Regents on Behalf of the University of Arizona** (herein called "ASSIGNEE"), an entity organized and existing under the laws of the State of Arizona, having a principal place of business at:

888 N. Euclid Avenue
Room 204
Tucson, Arizona, 85721,

is desirous of obtaining our entire right, title and interest in, to and under the said invention and the said application(s);

NOW, THEREFORE, in consideration of my contractual and other legal obligations, and other good and valuable consideration, the receipt of which is hereby acknowledged, I, a said ASSIGNOR, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, my entire right, title and interest in, to and under the said invention, and the said United States Application and all divisions, renewals, continuations and subsequent applications thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may

hereafter be filed for said invention in any country or countries foreign to the United States; together with the right to file such applications and the right to claim for the same the priority of said patent applications listed herein and applications thereof and therefrom under The International Union for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application and applications thereof and therefrom is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

AND I HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any official of any country or countries foreign to the United States whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument;

AND I HEREBY covenant and agree that I have full right to convey the entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith;

AND I HEREBY authorize the above-mentioned ASSIGNEE or its legal representative to insert in this instrument the filing date and serial number of said application(s) or any other information that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document;

AND I HEREBY further covenant and agree that I will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all continuing and subsequent applications, including divisional, reissue and foreign applications, make all rightful oaths, and generally cooperate and do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain, maintain, and enforce proper protection for said invention in any and all countries;

IN TESTIMONY WHEREOF, I hereunto set my hand and seal (if applicable) the day and year set opposite my signature.

Date _____

Indraneel GHOSH

STATE OF _____)
COUNTY OF _____) ss.

BEFORE ME, the undersigned authority, on this _____ day of _____, 2008, personally appeared the above person, known to me to be the person whose name is subscribed to this instrument and who acknowledged to me that he executed the same of his own free will for the purposes and consideration herein expressed.

Date:

Notary Public

My Commission expires: _____

Date _____

Cliff L. STAINS

STATE OF _____)
) ss.
COUNTY OF _____)

BEFORE ME, the undersigned authority, on this _____ day of _____, 2008, personally appeared the above person, known to me to be the person whose name is subscribed to this instrument and who acknowledged to me that he executed the same of his own free will for the purposes and consideration herein expressed.

Date:

Notary Public

My Commission expires: _____

Additional Assignors on additional sheets: Yes

11/26/08
Date

Jason R. Porter
Jason R. PORTER

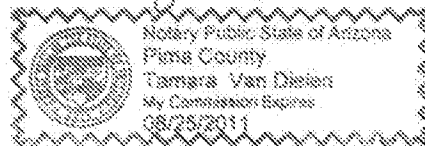
STATE OF Arizona)
COUNTY OF Pima) ss.

BEFORE ME, the undersigned authority, on this 26 day of November, 2008, personally appeared the above person, known to me to be the person whose name is subscribed to this instrument and who acknowledged to me that he executed the same of his own free will for the purposes and consideration herein expressed.

Date: 11-26-2008

Tamara Van Dierik
Notary Public

My Commission expires: 08-25-2011



Date

Benjamin JESTER

STATE OF _____)
COUNTY OF _____) ss.

BEFORE ME, the undersigned authority, on this _____ day of _____, 2008, personally appeared the above person, known to me to be the person whose name is subscribed to this instrument and who acknowledged to me that he executed the same of his own free will for the purposes and consideration herein expressed.

Date: _____

Notary Public

My Commission expires: _____

Additional Assignors on additional sheets: Yes

Date Jennifer FURMAN

STATE OF _____)
) ss.
COUNTY OF _____)

BEFORE ME, the undersigned authority, on this _____ day of _____, 2008, personally appeared the above person, known to me to be the person whose name is subscribed to this instrument and who acknowledged to me that he executed the same of his own free will for the purposes and consideration herein expressed.

Date: _____
Notary Public

My Commission expires: _____

Additional Assignors on additional sheets: No