

Form PTO-1595 (Rev. 03-05)  
OMB No. 0651-0027 (exp. 9/30/2006)

U.S. DEPARTMENT OF COMMERCE  
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### RECORDATION FORM COVER SHEET PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

**1. Name of conveying party(ies):**  
 Donna AMBROSINO (03/08/2005), Gregory J. BABCOCK (03/11/2005), Teresa BROERING (03/11/2005), Robert GRAZIANO (04/05/2005).  
 Additional name(s) of conveying party(ies) attached?  Yes  No

**3. Nature of conveyance/Execution Date(s):**  
 Execution Date(s): In parentheses after inventor name  
 Assignment  Merger  Change of Name  
 Security Agreement  Joint Research Agreement  
 Government Interest Assignment  
 Executive Order 9424, Confirmatory License  
 Other \_\_\_\_\_

**2. Name and address of receiving party(ies)**  
 Name: UNIVERSITY OF MASSACHUSETTS  
 Internal Address: \_\_\_\_\_  
 Street Address: \_\_\_\_\_  
 One Beacon Street, 26th Floor  
 City: Boston  
 State: Massachusetts  
 Country: United States of America Zip: 02108  
 Additional name(s) & address(es) attached?  Yes  No

**4. Application or patent number(s):**  
 A. Patent Application No.(s)  
11/051453  
 Additional numbers attached?  Yes  No

This document is being filed together with a new application.  
 B. Patent No.(s)  
 \_\_\_\_\_  
 Yes  No

**5. Name and address to whom correspondence concerning document should be mailed:**  
 Name: Giulio A. DeConti, Jr.  
LAHIVE & COCKFIELD, LLP  
 Internal Address: Atty. Dkt.: MJ1-001  
 Street Address: 28 State Street  
 City: Boston  
 State: MA Zip: 02109  
 Phone Number: (617) 227-7400  
 Fax Number: (617) 742-4214  
 Email Address: \_\_\_\_\_

**6. Total number of applications and patents involved:** 1  
**7. Total fee (37 CFR 1.21(h) & 3.41)** \$ 40.00  
 Authorized to be charged by credit card  
 Authorized to be charged to deposit account  
 Enclosed  
 None required (government interest not affecting title)

**B. Payment Information**  
 a. Credit Card Last 4 Numbers \_\_\_\_\_  
 Expiration Date \_\_\_\_\_  
 b. Deposit Account Number 12-0080  
 Authorized User Name Giulio A. DeConti, Jr.

**9. Signature:**  
  
 \_\_\_\_\_  
 Signature Date  
Peter W. Dini, Ph.D. - 52,821 Total number of pages including cover sheet, attachments, and documents: 50  
 Name of Person Signing

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office, facsimile no. (703) 308-5996 at MS Assignment Recordation Services, Director of the US Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.  
 Dated: July 6, 2005 Signature:  (Peter W. Dini, Ph.D.)

CH \$40.00 120080 11061463

RECORDATION FORM COVER SHEET  
(continued)

Form PTO-1595

Additional Conveying Party(ies)/Execution Date(s) (1. Continued):

Hector Javier HERNANDEZ (03/11/2005), Israel LOWY (04/01/2005), Robert MANDELL (03/11/2005), Deborah MOLRINE (03/11/2005), William D. THOMAS, Jr. (03/11/2005), and Hui-Fen ZHANG (04/05/2005)

Additional Assignees (2. Continued):

Assignee Name: MEDAREX, INC.

Internal Address:

Street Address: 707 State Road

City: Princeton State: New Jersey Country: United States of America Zip: 08540

Assignee Name: \_\_\_\_\_

Internal Address:

Street Address:

City: \_\_\_\_\_ State: \_\_\_\_\_ Country: \_\_\_\_\_ Zip: \_\_\_\_\_

Assignee Name: \_\_\_\_\_

Internal Address:

Street Address:

City: \_\_\_\_\_ State: \_\_\_\_\_ Country: \_\_\_\_\_ Zip: \_\_\_\_\_

Additional Applications and/or Patents (4. Continued):

Additional Patent Application Numbers  
4A. Continued:

Additional Patent Numbers  
4B. Continued:

Additional numbers attached?

Yes

No

### ASSIGNMENT BY INVENTORS

WE, Donna AMBROSINO; Gregory J. BABCOCK; Theresa BROERING; Robert GRAZIANO; Hector Javier HERNANDEZ; Israel LOWY; Robert MANDELL; Deborah MOLRINE; William D. THOMAS, Jr.; and Hui-Fen ZHANG, of ~~Jamaica Plain, MA~~ <sup>AVON</sup> Massachusetts; Marlborough, Massachusetts; Brookline, Massachusetts; Frenchtown, New Jersey; Canton, Massachusetts; Dobbs Ferry, New York; Upton, Massachusetts; Newton, Massachusetts; Somerville, Massachusetts; and Bridgewater, New Jersey, respectively, in consideration of One Dollar and other valuable consideration paid to us by

UNIVERSITY OF MASSACHUSETTS and MEDAREX, INC.

a University and Corporation, respectively of Massachusetts and New Jersey, respectively, having their principal places of business at One Beacon Street, 26th Floor, Boston, Massachusetts 02108; and 707 State Road, Princeton, New Jersey 08540, respectively, the receipt of which is hereby acknowledged, do hereby sell, assign and transfer unto said

UNIVERSITY OF MASSACHUSETTS and MEDAREX, INC.

their successors and assigns, the entire interest for the United States of America and all foreign countries including all rights of priority under the International Convention for the Protection of Industrial Property in a certain invention or improvement in

ANTIBODIES AGAINST CLOSTRIDIUM DIFFICILE TOXINS AND USES THEREOF

described in an application

Executed by us of even date herewith and about to be filed

or

Application No.11/051453, filed on February 4, 2005

This application claims the benefit of the following provisional application(s):

Provisional Application No. 60/542357, filed on February 6, 2004  
Provisional Application No. 60/613854, filed on September 28, 2004

in the United States Patent and Trademark Office, and in all Letters Patent of the United States and all foreign countries which may or shall be granted on said invention, or any parts thereof, or on said application, or any divisional, continuing, reissue or other applications based in whole or in part thereon. And we agree, for ourselves and our executors and administrators, with said University and Corporation, respectively and their successors and assigns but at their or their expense and charges, hereafter to execute all applications, amended specifications, deed or other instrument, and to do all acts necessary or proper to secure the grant of Letters Patent in the United States and in all other countries to said corporation, with specifications and claims in such form as shall be approved by the counsel of said University and Corporation,

respectively and to vest and confirm in said corporation, its successors and assigns, the legal title to all such patents. .

And we do hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said corporation, its successors and assigns.

And we do further hereby grant the attorneys/agents of Lahive & Cockfield, LLP, the power to insert on this Assignment the filing date and/or application number of said application.

*Donna Ambrosino*  
Donna Ambrosino

Date: 3/2/05

United States of America )  
State of Massachusetts ) ss.:  
County of Suffolk )

On this 11<sup>th</sup> day of March, 2005 before me, the  
the undersigned notary public, personally appeared Donna Ambrosino  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was MA - Driver's License, to be the person whose name  
is signed on the preceding or attached document in my presence.

*Terry J. King* (official signature and seal of notary)

My commission expires \_\_\_\_\_



TERRY J. KING  
Notary Public  
Commonwealth of Massachusetts  
My Commission Expires  
April 12, 2007

Gregory J. Babcock

Date: 3/11/05

United States of America )  
State of Massachusetts ) ss.:  
County of Suffolk )

On this 11th day of March, 2005 before me, the  
the undersigned notary public, personally appeared Gregory J. Babcock  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was MA-Driver's License, to be the person whose name  
is signed on the preceding or attached document in my presence.

Terry J. King (official signature and seal of notary)

My commission expires



TERRY J. KING  
Notary Public  
Commonwealth of Massachusetts  
My Commission Expires  
April 12, 2007

Teresa Broering  
 Teresa Broering  
 TJB 3/11/05

Date: 3/11/05

United States of America )  
 State of Massachusetts ) ss.:  
 County of Suffolk )

On this 11th day of March, 2005 before me, the  
 the undersigned notary public, personally appeared Teresa Broering  
 (name of document signer), proved to me through satisfactory evidence of identification,  
 which was MA-Drivers License, to be the person whose name  
 is signed on the preceding or attached document in my presence.

Terry J. King (official signature and seal of notary)

My commission expires



TERRY J. KING  
 Notary Public  
 Commonwealth of Massachusetts  
 My Commission Expires  
 April 12, 2007

\_\_\_\_\_  
Robert Graziano

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
the undersigned notary public, personally appeared \_\_\_\_\_  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was \_\_\_\_\_, to be the person whose name  
is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

Hector Javier Hernandez  
Hector Javier Hernandez

Date: 3-11-05

United States of America )  
State of Massachusetts ) ss.:  
County of Suffolk )

On this 11<sup>th</sup> day of March, 2005 before me, the  
the undersigned notary public, personally appeared Hector Javier Hernandez  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was MA-Drivers License, to be the person whose name  
is signed on the preceding or attached document in my presence.

Terry J. King (official signature and seal of notary)

My commission expires



TERRY J. KING  
Notary Public  
Commonwealth of Massachusetts  
My Commission Expires  
April 12, 2007

\_\_\_\_\_  
Israel Lowy

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
the undersigned notary public, personally appeared \_\_\_\_\_  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was \_\_\_\_\_, to be the person whose name  
is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

*Robert Mandell*

Robert Mandell

Date: 3/11/05

United States of America )  
State of Massachusetts ) ss.:  
County of Suffolk )

On this 11th day of March, 2005 before me, the  
the undersigned notary public, personally appeared Robert Mandell  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was MA-Driver's License, to be the person whose name  
is signed on the preceding or attached document in my presence.

Terry J. King (official signature and seal of notary)

My commission expires



TERRY J. KING  
Notary Public  
Commonwealth of Massachusetts  
My Commission Expires  
April 12, 2007

Deborah Moline  
Deborah Moline

Date: March 11, 2005

United States of America )  
State of Massachusetts ) ss.:  
County of Suffolk )

On this 11th day of March, 2005 before me, the  
the undersigned notary public, personally appeared Deborah Moline  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was MA - Driver's License, to be the person whose name  
is signed on the preceding or attached document in my presence.

Terry J. King (official signature and seal of notary)

My commission expires



TERRY J. KING  
Notary Public  
Commonwealth of Massachusetts  
My Commission Expires  
April 12, 2007

N.O.T.  
William D. Thomas, Jr.

Date: 03.11.05

United States of America )  
State of Massachusetts ) ss.:  
County of Suffolk )

On this 11th day of March, 2005 before me, the  
the undersigned notary public, personally appeared William D. Thomas, Jr.  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was MA-Driver's License, to be the person whose name  
is signed on the preceding or attached document in my presence.

Terry J. King (official signature and seal of notary)

My commission expires



TERRY J. KING  
Notary Public  
Commonwealth of Massachusetts  
My Commission Expires  
April 12, 2007

\_\_\_\_\_  
Hui-Fen Zhang

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
the undersigned notary public, personally appeared \_\_\_\_\_  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was \_\_\_\_\_, to be the person whose name  
is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

**ASSIGNMENT BY INVENTORS**

WE, Donna AMBROSINO; Gregory J. BABCOCK; Theresa BROERING; Robert GRAZIANO; Hector Javier HERNANDEZ; Israel LOWY; Robert MANDELL; Deborah MOLRINE; William D. THOMAS, Jr.; and Hui-Fen ZHANG, of Jamaica Plain, Massachusetts; Marlborough, Massachusetts; Brookline, Massachusetts; Frenchtown, New Jersey; Canton, Massachusetts; Dobbs Ferry, New York; Upton, Massachusetts; Newton, Massachusetts; Somerville, Massachusetts; and Bridgewater, New Jersey, respectively, in consideration of One Dollar and other valuable consideration paid to us by

UNIVERSITY OF MASSACHUSETTS and MEDAREX, INC.

a University and Corporation, respectively of Massachusetts and New Jersey, respectively, having their principal places of business at One Beacon Street, 26th Floor, Boston, Massachusetts 02108; and 707 State Road, Princeton, New Jersey 08540, respectively, the receipt of which is hereby acknowledged, do hereby sell, assign and transfer unto said

UNIVERSITY OF MASSACHUSETTS and MEDAREX, INC.

their successors and assigns, the entire interest for the United States of America and all foreign countries including all rights of priority under the International Convention for the Protection of Industrial Property in a certain invention or improvement in

**ANTIBODIES AGAINST CLOSTRIDIUM DIFFICILE TOXINS AND USES THEREOF**

described in an application

Executed by us of even date herewith and about to be filed

or

Application No.11/051453, filed on February 4, 2005

This application claims the benefit of the following provisional application(s):

Provisional Application No. 60/542357, filed on February 6, 2004  
Provisional Application No. 60/613854, filed on September 28, 2004

in the United States Patent and Trademark Office, and in all Letters Patent of the United States and all foreign countries which may or shall be granted on said invention, or any parts thereof, or on said application, or any divisional, continuing, reissue or other applications based in whole or in part thereon. And we agree, for ourselves and our executors and administrators, with said University and Corporation, respectively and their successors and assigns but at their or their expense and charges, hereafter to execute all applications, amended specifications, deed or other instrument, and to do all acts necessary or proper to secure the grant of Letters Patent in the United States and in all other countries to said corporation, with specifications and claims in such form as shall be approved by the counsel of said University and Corporation,

actively and to vest and confirm in said corporation, its successors and assigns, the legal to all such patents.

And we do hereby authorize and request the Commissioner of Patents and Trademarks in the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said corporation, its successors and assigns.

And we do further hereby grant the attorneys/agents of Lahive & Cockfield, LLP, the power to insert on this Assignment the filing date and/or application number of said application.

3

me

\_\_\_\_\_  
Donna Ambrosino

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
the undersigned notary public, personally appeared \_\_\_\_\_  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was \_\_\_\_\_, to be the person whose name  
is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

\_\_\_\_\_  
Gregory J. Babcock

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
the undersigned notary public, personally appeared \_\_\_\_\_  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was \_\_\_\_\_, to be the person whose name  
is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

\_\_\_\_\_  
Theresa Broering

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
the undersigned notary public, personally appeared \_\_\_\_\_  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was \_\_\_\_\_, to be the person whose name  
is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

Robert H. Graziano  
Robert Graziano

Date: April 5, 2005

United States of America  
State of New Jersey } ss.:  
County of Warden }

On this 5<sup>th</sup> day of April, 2005 before me, the  
the undersigned notary public, personally appeared Robert Graziano  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was Current passport, to be the person whose name  
is signed on the preceding or attached document in my presence.

Elizabeth Hogan (official signature and seal of notary)

My commission expires March 5, 2005



\_\_\_\_\_  
Hector Javier Hernandez

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
the undersigned notary public, personally appeared \_\_\_\_\_  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was \_\_\_\_\_, to be the person whose name  
is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

\_\_\_\_\_  
Israel Lowy

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
the undersigned notary public, personally appeared \_\_\_\_\_  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was \_\_\_\_\_, to be the person whose name  
is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

\_\_\_\_\_  
Robert Mandell

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
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is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

\_\_\_\_\_  
Deborah Moline

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
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\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

\_\_\_\_\_  
William D. Thomas, Jr.

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

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\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

Hui-Fen Zhang

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

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\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

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actively and to vest and confirm in said corporation, its successors and assigns, the legal to all such patents.

And we do hereby authorize and request the Commissioner of Patents and Trademarks in the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said corporation, its successors and assigns.

And we do further hereby grant the attorneys/agents of Lahive & Cockfield, LLP, the power to insert on this Assignment the filing date and/or application number of said application.

3

me

\_\_\_\_\_  
Donna Ambrosino

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
the undersigned notary public, personally appeared \_\_\_\_\_  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was \_\_\_\_\_, to be the person whose name  
is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

\_\_\_\_\_  
Gregory J. Babcock

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
the undersigned notary public, personally appeared \_\_\_\_\_  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was \_\_\_\_\_, to be the person whose name  
is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

\_\_\_\_\_  
Theresa Broering

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
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which was \_\_\_\_\_, to be the person whose name  
is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

\_\_\_\_\_  
Robert Graziano

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
the undersigned notary public, personally appeared \_\_\_\_\_  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was \_\_\_\_\_, to be the person whose name  
is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

\_\_\_\_\_  
Hector Javier Hernandez

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
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(name of document signer), proved to me through satisfactory evidence of identification,  
which was \_\_\_\_\_, to be the person whose name  
is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

*Israel Lowy*  
Israel Lowy

Date: 4-1-05

United States of America )  
State of NEW JERSEY ) ss.:  
County of WARREN )

On this 1<sup>ST</sup> day of APRIL, 2005 before me, the  
the undersigned notary public, personally appeared ISRAEL LOWY  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was NEW YORK DRIVER LICENSE 133 478 725, to be the person whose name  
is signed on the preceding or attached document in my presence.

*Deanna Dieth* (official signature and seal of notary)

My commission expires 11-2-2006

Sworn to and subscribed  
before me this  
1<sup>st</sup> day of APR. 2005

DEANNA DIETH  
NOTARY PUBLIC OF NEW JERSEY  
Commission Expires 11/2/2006

\_\_\_\_\_  
Robert Mandell

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
the undersigned notary public, personally appeared \_\_\_\_\_  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was \_\_\_\_\_, to be the person whose name  
is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

\_\_\_\_\_  
Deborah Molrine

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
the undersigned notary public, personally appeared \_\_\_\_\_  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was \_\_\_\_\_, to be the person whose name  
is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

\_\_\_\_\_  
William D. Thomas, Jr.

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
the undersigned notary public, personally appeared \_\_\_\_\_  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was \_\_\_\_\_, to be the person whose name  
is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

\_\_\_\_\_  
Hui-Fen Zhang

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
the undersigned notary public, personally appeared \_\_\_\_\_  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was \_\_\_\_\_, to be the person whose name  
is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

## ASSIGNMENT BY INVENTORS

WE, Donna AMBROSINO; Gregory J. BABCOCK; Theresa BROERING; Robert GRAZIANO; Hector Javier HERNANDEZ; Israel LOWY; Robert MANDELL; Deborah MOLRINE; William D. THOMAS, Jr.; and Hui-Fen ZHANG, of Jamaica Plain, Massachusetts; Marlborough, Massachusetts; Brookline, Massachusetts; Frenchtown, New Jersey; Canton, Massachusetts; Dobbs Ferry, New York; Upton, Massachusetts; Newton, Massachusetts; Somerville, Massachusetts; and Bridgewater, New Jersey, respectively, in consideration of One Dollar and other valuable consideration paid to us by

UNIVERSITY OF MASSACHUSETTS and MEDAREX, INC.

a University and Corporation, respectively of Massachusetts and New Jersey, respectively, having their principal places of business at One Beacon Street, 26th Floor, Boston, Massachusetts 02108; and 707 State Road, Princeton, New Jersey 08540, respectively, the receipt of which is hereby acknowledged, do hereby sell, assign and transfer unto said

UNIVERSITY OF MASSACHUSETTS and MEDAREX, INC.

their successors and assigns, the entire interest for the United States of America and all foreign countries including all rights of priority under the International Convention for the Protection of Industrial Property in a certain invention or improvement in

ANTIBODIES AGAINST CLOSTRIDIUM DIFFICILE TOXINS AND USES THEREOF

described in an application

Executed by us of even date herewith and about to be filed

or

Application No. 11/051453, filed on February 4, 2005

This application claims the benefit of the following provisional application(s):

Provisional Application No. 60/542357, filed on February 6, 2004  
 Provisional Application No. 60/613854, filed on September 28, 2004

in the United States Patent and Trademark Office, and in all Letters Patent of the United States and all foreign countries which may or shall be granted on said invention, or any parts thereof, or on said application, or any divisional, continuing, reissue or other applications based in whole or in part thereon. And we agree, for ourselves and our executors and administrators, with said University and Corporation, respectively and their successors and assigns but at their or their expense and charges, hereafter to execute all applications, amended specifications, deed or other instrument, and to do all acts necessary or proper to secure the grant of Letters Patent in the United States and in all other countries to said corporation, with specifications and claims in such form as shall be approved by the counsel of said University and Corporation,

actively and to vest and confirm in said corporation, its successors and assigns, the legal to all such patents.

And we do hereby authorize and request the Commissioner of Patents and Trademarks in the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said corporation, its successors and assigns.

And we do further hereby grant the attorneys/agents of Lahive & Cockfield, LLP, the power to insert on this Assignment the filing date and/or application number of said application.

—  
e

—  
me

\_\_\_\_\_  
Donna Ambrosino

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
the undersigned notary public, personally appeared \_\_\_\_\_  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was \_\_\_\_\_, to be the person whose name  
is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

\_\_\_\_\_  
Gregory J. Babcock

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
the undersigned notary public, personally appeared \_\_\_\_\_  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was \_\_\_\_\_, to be the person whose name  
is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

\_\_\_\_\_  
Theresa Broering

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
the undersigned notary public, personally appeared \_\_\_\_\_  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was \_\_\_\_\_, to be the person whose name  
is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

\_\_\_\_\_  
Robert Graziano

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
the undersigned notary public, personally appeared \_\_\_\_\_  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was \_\_\_\_\_, to be the person whose name  
is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

Hector Javier Hernandez

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
the undersigned notary public, personally appeared \_\_\_\_\_  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was \_\_\_\_\_, to be the person whose name  
is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

\_\_\_\_\_  
Israel Lowy

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
the undersigned notary public, personally appeared \_\_\_\_\_  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was \_\_\_\_\_, to be the person whose name  
is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

\_\_\_\_\_  
Robert Mandell

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
the undersigned notary public, personally appeared \_\_\_\_\_  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was \_\_\_\_\_, to be the person whose name  
is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

\_\_\_\_\_  
Deborah Molrine

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
the undersigned notary public, personally appeared \_\_\_\_\_  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was \_\_\_\_\_, to be the person whose name  
is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

\_\_\_\_\_  
William D. Thomas, Jr.

Date: \_\_\_\_\_

United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me, the  
the undersigned notary public, personally appeared \_\_\_\_\_  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was \_\_\_\_\_, to be the person whose name  
is signed on the preceding or attached document in my presence.

\_\_\_\_\_  
(official signature and seal of notary)

My commission expires \_\_\_\_\_

Hui-Fen Zhang  
Hui-Fen Zhang

Date: April 5, 2005

United States of America )  
State of New Jersey ) ss.:  
County of Warren )

On this 5<sup>th</sup> day of April, 2005 before me, the  
the undersigned notary public, personally appeared Hui-Fen Zhang  
(name of document signer), proved to me through satisfactory evidence of identification,  
which was current New Jersey Drivers License, to be the person whose name  
is signed on the preceding or attached document in my presence.

Elizabeth Hogan (official signature and seal of notary)  
My commission expires March 5, 2007

