
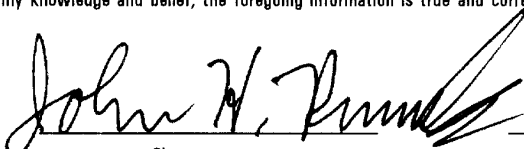


MRD 6-22-98

FORM PTO-1595 (Rev.6-93) OMB No. 0651-0011 (exp. 4/94)		07-08-1998  100757031		U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office <b>RECEIVED</b> JUN 25 1998 or copy thereof.	
To the Honorable Commissioner of Patents and Tr				2. Name and address of receiving party(ies) Name: <u>Board of Supervisors of Louisiana State University and Agricultural and Mechanical College</u> Internal Address: <u>LSU Agricultural Center</u> Street Address: <u>P. O. Box 25055</u> City: <u>Baton Rouge</u> State: <u>LA</u> Zip: <u>70894-5055</u> Additional names(s) & address(es) attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
1. Name of conveying party(ies): <u>Frederick Martin Enright</u> Additional name(s) of conveying party(ies) attached? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no 3. Nature of Conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other _____ Execution Dates: <u>May 28, 1998</u> (See also Cover Sheet Page 2)					
4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: _____ A. Patent Application No.(s) <u>08/148,158 (filed 11/5/93)</u> <u>08/705,044 (filed 8/29/96)</u> <u>08/989,089 (filed 12/11/97)</u> B. Patent No.(s) Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
5. Name and address of party to whom correspondence concerning document should be mailed: Name: <u>John H. Runnels</u> Internal Address: <u>Taylor, Porter, Brooks &amp; Phillips, L.L.P.</u> Street Address: <u>P. O. Box 2471</u> City: <u>Baton Rouge</u> State: <u>LA</u> ZIP: <u>70821</u>				6. Number of applications and patents involved: <u>3</u> 7. Total fee (37 CFR 3.41) ..... \$ <u>120.00</u> <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Authorized to be charged to deposit account 8. Deposit account number: _____ (Attach duplicate copy of this page if paying by deposit account)	
<b>DO NOT USE THIS SPACE</b>					
9. Statement and signature: To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. <u>John H. Runnels</u>  <u>June 22, 1998</u> Name of Person Signing Signature Date Total number of pages including cover sheet, attachments, and document: <u>9</u>					

( 07/06/1998 DNGUYEN 00000256 08148158  
01 FC:581 120.00 OP )

Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents and Trademarks, Box Assignments  
Washington, D.C. 20231

PATENT  
REEL: 9278 FRAME: 0713

RECORDATION FORM COVER SHEET  
PAGE 2

1. Name of Conveying Party(ies):

Gerhardt Gunther Schurig

Execution Date: June 10, 1998

2. Name and address of receiving party(ies):

Virginia Polytechnic Institute and State University  
Intellectual Properties  
1900 Kraft Drive, Suite 107

City: Blacksburg State: VA Zip: 24060

John H. Wyckoff III

Execution Date: May 13, 1998

Board of Regents for Oklahoma State University  
Office of Intellectual Property & Technology Transfer  
Oklahoma State University  
305 Whitehurst

City: Stillwater State: OK Zip: 74078-1039

Alex Winter

Execution Date: May 26, 1998

Cornell Research Foundation, Inc.  
Cornell Business & Technology Park  
20 Thornwood Drive, Suite 105

City: Ithaca State: NY Zip: 14850

### ASSIGNMENT

WHEREAS I, Frederick Martin Enright, a citizen of the United States of America, residing at 5238 North Chalet Court, Baton Rouge, Louisiana 70808, having made certain inventions with Alex Winter, Gerhardt Gunther Schurig, and John H. Wyckoff III disclosed and claimed in one or more of the following three United States Patent Applications: (1) "Novel Non-Viable Vaccines against Facultative Intracellular Pathogens," serial number 08/148,158, filed November 5, 1993; (2) "Novel Non-Viable Vaccines against Facultative Intracellular Pathogens," serial number 08/705,044, filed August 29, 1996; and (3) "Method for Protecting a Mammalian Host against Infection by *Brucella*," serial number 08/989,089, filed December 11, 1997;

Now, therefore, for good and valuable consideration, receipt of which is acknowledged, I have agreed to assign and transfer and do hereby assign and transfer unto the Board of Supervisors of Louisiana State University and Agricultural and Mechanical College, its successors and assigns, my entire right, title, and interest in and to the said inventions and each of the above three listed patent applications, and in and to any division, continuation, or continuation-in-part of any of said applications, and in and to any and all Letters Patent and reissues and extensions thereof, of the United States of America and countries foreign thereto (including the right to apply for Letters Patent in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), which have been or may be granted on any of the foregoing to be held and enjoyed as fully and exclusively as they would have been by me had this assignment and transfer not been made.

I do further agree for myself, and for my heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such acts as I lawfully may, that may be deemed necessary by the said Board of Supervisors of Louisiana State University and Agricultural and Mechanical College, its successors, assigns, and nominees, fully to secure its interest as aforesaid and to obtain or maintain Letters Patent in any and all countries;

And I do hereby authorize the Commissioner of Patents and Trademarks, and any foreign counterpart to the Commissioner, to issue any and all Letters Patent which may be granted upon any of the said applications, to the said Board of Supervisors of Louisiana State University and Agricultural and Mechanical College as the assignee of the entire interest therein.

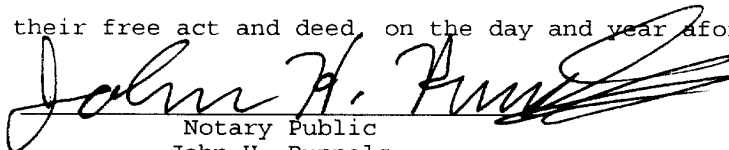
In witness whereof, I have hereunto signed my name on the day and year set forth below.

  
Frederick Martin Enright

STATE OF LOUISIANA

PARISH OF EAST BATON ROUGE

On this 28th day of May, 1998, before me personally appeared Frederick Martin Enright, personally known to me, and known by me to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as their free act and deed, on the day and year aforesaid.

  
Notary Public  
John H. Runnels  
My Commission expires at death

(SEAL)

### ASSIGNMENT

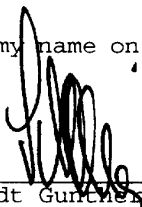
WHEREAS I, Gerhardt Gunther Schurig, a citizen of Chile, residing at 2906 Wakefield Drive, Blacksburg, Virginia 24060, having made certain inventions with Frederick Martin Enright, Alex Winter, and John H. Wyckoff III disclosed and claimed in one or more of the following three United States Patent Applications: (1) "Novel Non-Viable Vaccines against Facultative Intracellular Pathogens," serial number 08/148,158, filed November 5, 1993; (2) "Novel Non-Viable Vaccines against Facultative Intracellular Pathogens," serial number 08/705,044, filed August 29, 1996; and (3) "Method for Protecting a Mammalian Host against Infection by *Brucella*," serial number 08/989,089, filed December 11, 1997;

Now, therefore, for good and valuable consideration, receipt of which is acknowledged, I have agreed to assign and transfer and do hereby assign and transfer unto the Virginia Polytechnic Institute and State University, its successors and assigns, my entire right, title, and interest in and to the said inventions and each of the above three listed patent applications, and in and to any division, continuation, or continuation-in-part of any of said applications, and in and to any and all Letters Patent and reissues and extensions thereof, of the United States of America and countries foreign thereto (including the right to apply for Letters Patent in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), which have been or may be granted on any of the foregoing to be held and enjoyed as fully and exclusively as they would have been by me had this assignment and transfer not been made.

I do further agree for myself, and for my heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such acts as I lawfully may, that may be deemed necessary by the said Virginia Polytechnic Institute and State University, its successors, assigns, and nominees, fully to secure its interest as aforesaid and to obtain or maintain Letters Patent in any and all countries;

And I do hereby authorize the Commissioner of Patents and Trademarks, and any foreign counterpart to the Commissioner, to issue any and all Letters Patent which may be granted upon any of the said applications, to the said Virginia Polytechnic Institute and State University as the assignee of the entire interest therein.


In witness whereof, I have hereunto signed my name on the day and year set forth below.

  
\_\_\_\_\_  
Gerhardt Gunther Schurig

STATE OF VIRGINIA

COUNTY OF MONTGOMERY

On this 10<sup>th</sup> day of JUNE, 1998, before me personally appeared Gerhardt Gunther Schurig, personally known to me, and known by me to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as their free act and deed, on the day and year aforesaid.

  
\_\_\_\_\_  
Notary Public  
REGINA N. WIMMER  
[Printed Name of Notary]

My Commission expires May 31, 2002  
(SEAL)

## ASSIGNMENT

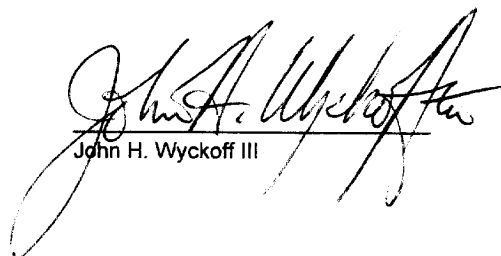
WHEREAS I, John H. Wyckoff III, a citizen of the United States of America, residing at Route 1, Box 409, Stillwater, Oklahoma 74075, having made certain inventions with Frederick Martin Enright, Gerhardt Gunther Schurig, and Alex Winter disclosed and claimed in one or more of the following three United States Patent Applications: (1) "Novel Non-Viable Vaccines against Facultative Intracellular Pathogens," serial number 08/148,158, filed November 5, 1993; (2) "Novel Non-Viable Vaccines against Facultative Intracellular Pathogens," serial number 08/705,044, filed August 29, 1996; and (3) "Method for Protecting a Mammalian Host against Infection by *Brucella*," serial number 08/989,089, filed December 11, 1997;

Now, therefore, for good and valuable consideration, receipt of which is acknowledged, I have agreed to assign and transfer and do hereby assign and transfer unto Board of Regents for Oklahoma State University, its successors and assigns, my entire right, title, and interest in and to the said inventions and each of the above three listed patent applications, and in and to any division, continuation, or continuation-in-part of any of said applications, and in and to any and all Letters Patent and reissues and extensions thereof, of the United States of America and countries foreign thereto (including the right to apply for Letters Patent in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), which have been or may be granted on any of the foregoing to be held and enjoyed as fully and exclusively as they would have been by me had this assignment and transfer not been made.

I do further agree for myself, and for my heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such acts as I lawfully may, that may be deemed necessary by said Board of Regents for Oklahoma State University, its successors, assigns, and nominees, fully to secure its interest as aforesaid and to obtain or maintain Letters Patent in any and all countries;

And I do hereby authorize the Commissioner of Patents and Trademarks, and any foreign counterpart to the Commissioner, to issue any and all Letters Patent which may be granted upon any of the said applications, to said Board of Regents for Oklahoma State University as the assignee of the entire interest therein.

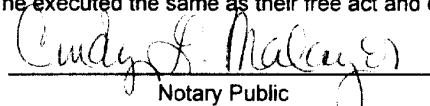
In witness whereof, I have hereunto signed my name on the day and year set forth below.

  
John H. Wyckoff III

STATE OF OKLAHOMA

COUNTY OF PAYNE

On this 13th day of May, 1998, before me personally appeared John H. Wyckoff III,  
personally known to me, and known by me to be the person described in and who executed the foregoing  
instrument, and acknowledged that he executed the same as their free act and deed, on the day and year aforesaid.

  
Notary Public  
CINDY L. MALAYER  
[Printed Name of Notary]

My Commission expires DECEMBER 9, 2000

(SEAL)



# ASSIGNMENT

In consideration of One Dollar (\$1.00), and other good and valuable consideration, the receipt of which is hereby acknowledged, (I) (we) the undersigned,

Alex Winter  
9 Stormy View Road  
Ithaca, New York 14850

Hereby sell, assign and transfer to:

**CORNELL RESEARCH FOUNDATION, INC.**

a corporation of The State of New York, having a place of business at Cornell Business & Technology Park, 20 Thornwood Drive, Suite 105, Ithaca, New York, 14850 its successors, assigns and legal representatives, the entire right, title and interest for the United States and all foreign countries, in and to any and all improvements which are disclosed in the applications for United States Letters Patent, Serial Nos. 08/148,158, filed November 5, 1993, entitled "**NOVEL NON-VIABLE VACCINES AGAINST FACULTATIVE INTRACELLULAR PATHOGENS,**" and USSN 08/705,044 filed August 29, 1996, entitled "**NOVEL NON-PATHOGENS,**"; and USSN 08/989,089, filed December 11, 1997, entitled "**METHOD FOR PROTECTING A MAMMALIAN HOST AGAINST INFECTION BY BRUCELLA,**" and in and to said application and all divisional, continuing, substitute, renewal, reissue, and all other applications for Letters Patent which have been or shall be filed in the United States and all foreign countries on any of said improvements; and in and to all original and reissued patents which have been or shall be issued in the United States and all foreign countries on said improvements;

Agree that said Assignee may apply for and receive Letters Patent for said improvements in its own name; and that, when requested, without charge to but at the expense of said Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all said improvements, execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee, its successors, assigns, and representatives, all facts known to the undersigned relating to said improvements and the history thereof; and generally do everything possible which said Assignee, its successors, assigns or representatives shall consider desirable for aiding in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns and legal representatives; and

Covenant with said Assignee, its successors, assigns and legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Date May 26, 1998

Alexander J. Winter (L.S.)  
Alex Winter

Date \_\_\_\_\_

\_\_\_\_\_ (L.S.)

Date \_\_\_\_\_

\_\_\_\_\_ (L.S.)