Client Code: NIH300.001NP

RECORDATION FORM COVER SHEET PATENTS ONLY

To the Director, U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies): (List using letters or numbers for multiple parties) 1. Lewis Markoff 2. Li Yu Additional name(s) of conveying party(ies) attached? () Yes (X) No 3. Nature of conveyance:	 Name and address of receiving party(ies): Name: The Government of the United States of America; as represented by the Secretary, Department of Health and Human Services Internal Address: Suite 325 Street Address: 6011 Executive Blvd. City: Rockville State: MD ZIP: 20852-3804 Additional name(s) of receiving party(ies) attached? 			
(X) Assignment () Security Agreement () Merger () Change of Name () Other:	() Yes (X) No 4. US or PCT Application number(s) or US Patent			
Execution Date: (List as in section 1 if multiple signatures) 1. September 15, 2008 2. September 13, 2008	number(s): (X) Patent Application No.: 11/629,560 Filing Date: December 14, 2006 Additional numbers attached? () Yes (X) No			
Party to whom correspondence concerning document should be mailed:	Total number of applications and patents involved: 1			
Customer No. 20,995 Address: Knobbe, Martens, Olson & Bear, LLP 2040 Main Street, 14 th Floor Irvine, CA 92614 Return Fax: (949) 760-9502 Attorney's Docket No.: NIH300.001NP				
7. Total fee (37 CFR 1.21(h)): \$40	8. Deposit account number: 11-1410			
(X) Authorized to be charged to deposit account	Please charge this account for any additional fees which may be required, or credit any overpayment to this account.			
 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>Daniel Hart.</u> Name of Person Signing				
40,637 Registration No. Signature Date 40,637 Signature Date				
Total number of pages including cover sheet, attachments and document 4				

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> PATENT REEL: 021546 FRAME: 0787

KNOB NPB.

NIH300.001NP PATENT

<u>ASSIGNMENT</u>

WHEREAS, we, Lewis Markoff and Li Yu, employees of the Department of Health and Human Services, have invented certain new and useful improvements in WEST NILE VIRUS WITH MUTATIONS IN THE 3' TERMINAL STEM AND LOOP SECONDARY STRUCTURE FOR USE AS LIVE VIRUS VACCINES, for which we have filed an application for Letters Patent of the United States Serial No.11/629,560, filed December 14, 2006, which is a U.S. National Phase of International Application No. PCT/US2005/020737, filed June 14, 2005, which claims the benefit of U.S. Provisional Application No. 60/579,386, filed June 14, 2004;

WHEREAS, we are the applicants named in the above-identified applications;

WHEREAS, the conditions under which said improvements were made are such as to entitle the Government under Paragraph 1(a) of Executive Order 10096 to an entire right, title, and interest therein, both domestic and foreign; and

WHEREAS, the Government of the United States is desirous of acquiring all domestic and foreign right, title and interest in the above-mentioned improvements and applications; and

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we hereby assign and transfer to the United States of America, as represented by the Secretary, Department of Health and Human Services, the full and exclusive rights in and to said improvements and said applications within each and every country in which the Government elects to file and the entire right, title and interest in and to such applications, and any continuations, continuations-in-part, divisions, reissues or extensions thereof, and including priority rights as may be filed in the U.S. and foreign countries, and such Letters Patent as may be granted 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 Secretary, Department of Health and Human Services, 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, provided that any expense of extending such assistance shall be paid by the Government.

Page 1 of 3

PATENT REEL: 021546 FRAME: 0788 Client Code :

NIH300.001NP

Serial No.

11/629,560

Filing Date :

December 14, 2006

IN WITNESS WHEREOF, I	hereunto set my	hand and seal t	his /J day of	
	\angle	en llu	A PUBLIC	
	Lewis	Markoff	MY COMMISSION	
STATE OF Mary land COUNTY OF Montgomery	88		6/22/2010	
COUNTY OF montgomery	\$5.		MERY CO	
On this 15 day of 3eptem 3e, 2008, before me, a Notary Public in and for the State and County aforesaid, personally appeared Lewis Markoff, personally known to me or proven on the basis of satisfactory evidence to be the person of that name, who signed and sealed the foregoing instrument, and acknowledged the same to be his/her free act and deed.				
	A Artura Notary Public in	and for the aforesa	id County and State	
	My Commission	Expires:	6-22-10	

Client Code

NIH300.001NP

Serial No.

11/629,560

Filing Date

December 14, 2006

IN WITNESS WHEREOF, I hereunto set my hand and seal this 13th day of September, 2008

Li Yu

STATE OF MARY LAND

COUNTY OF MONTGOMERY !! S!

On this 13th day of September. 2008, before me, a Notary Public in and for the State and County aforesaid, personally appeared Li Yu, personally known to me or proven on the basis of satisfactory evidence to be the person of that name, who signed and scaled the foregoing instrument, and acknowledged the same to be his/her free act and deed.

Notary Public in and for the aforesaid County and State

My Commission Expires:

Feb

2010

5902740 090908

RECORDED: 09/17/2008

LECHINE CHEA Notary Public Montgomery County Maryland My Commission Expires Feb 1, 2010