01-20-2004

IENT OF COMMERCE Form **PTO-1595** (Rev. 03/01) .102649465 OMB No. 0651-0027 (exp. 5/31/2002) To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof Attorney Docket No. 102182-24 Name and address of receiving party(ies). Name of conveying party(ies): 1) Yuhong Liu Name: Thomas Jefferson University 2) Jia Luo - -Street Address: 1020 Walnut Street 3) Matthew During Additional name(s) of conveying party(ies) X No Yes 3. Nature of Conveyance: X Assignment Merger Security Agreement Change of Name Philadelphia City: Other Zip: 19107 State: PA Additional name(s) & X No 1) 8/22/03; 2) 8/22/03; 3) 1/9/04 **Execution Date:** address(es) attached: 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the new application is: B. Patent No.(s): A. Patent Application No.(s): 10/427,129 Additional numbers attached? Yes Νo 5. Name and address of party to whom correspondence 6. Total number of applications and concerning document should be mailed: patents involved: Name: Nutter, McClennen & Fish, LLP 7. Total fee (37 CFR 3.41) 40.00 Street Address: Authorized to be charged to deposit account World Trade Center West Authorized to be charged to credit card 155 Seaport Boulevard (Form 2038 enclosed) 8. Deposit account number: City: State: Zip: **Boston** MA 02210-2604 (Attach duplicate copy of this page if paying by deposit account) DO NOT USE THIS SPACE 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. George A. Xixis Name of Person Signing Signature

Total number of pages including cover sheet, attachments, and documents:

01/16/2004 ECOOPER 00000003 104E71E9 01 FC:8021 40.00 0

PATENT

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REEL: 014884 FRAME: 0480

ASSIGNMENT

Whereas we, the undersigned, Yuhong Liu, Cherry Hill, New Jersey; Jia Luo, Philadelphia, PA; and Matthew During, Philadelphia, PA hereby have made certain inventions or discoveries (or both) set forth in an application for Letters Patent of the United States of America entitled **High Transgene Expression of A Pseudotyped Adeno-Associated Virus Type**, which application was filed on May 1, 2003 and assigned Application No. 10/427,129.

Whereas, Thomas Jefferson University, a private corporation of Pennsylvania, having a principal place of business at 1020 Walnut Street, Philadelphia, PA 19107 and which, together with its successors and assigns, is hereinafter called "Assignee," is desirous of acquiring the title, rights, benefits and privileges hereinafter recited;

Now, therefore, for valuable consideration furnished by Assignee to us, receipt and sufficiency of which we hereby acknowledge, we hereby, without reservation:

- 1. Assign, transfer and convey to Assignee the entire right, title and interest in and to said inventions and discoveries, said application for Letters Patent of the United States of America, any and all other applications for Letters Patent on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation, reissue and Convention applications based in whole or in part upon said inventions or discoveries, or upon said applications, and any and all Letters Patent, reissues, reexaminations, and extensions of Letters Patent granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said discoveries, said applications and said Letters Patent;
- 2. Authorize Assignee to file patent applications in any or all countries on any or all of said inventions and discoveries in our names or in the name of Assignee or otherwise as Assignee may deem advisable, under the International Convention or otherwise;
- 3. Authorize and request the Commissioner of Patents and Trademarks of the United States of America and the empowered officials of all other governments to issue or transfer all said Letters Patent to Assignee, as assignee of the entire right, title and interest therein or otherwise as Assignee may direct;
- 4. Warrant that we have not knowingly conveyed to others any right in said inventions, discoveries, applications or patents or any license to use the same or to make, use or sell anything embodying or utilizing any of said inventions or discoveries; and that we have good right to assign the same to Assignee without encumbrance;
- 5. Bind our heirs, legal representatives and assigns, as well as ourselves, to do, upon Assignee's request and at Assignee's expense, but without additional consideration to us or

PATENT REEL: 014884 FRAME: 0481 patent applications and the said Letters Patent shall be held and enjoyed by Assignee as fully and entirely as the same could have been held and enjoyed by us, our heirs, legal representatives and assigns if this assignment had not been made; and particularly to execute and deliver to Assignee all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by Assignee; to communicate to Assignee all facts known to us relating to said inventions and discoveries or the history thereof; and to furnish Assignee with any and all documents, photographs, models, samples and other physical exhibits in our control or in the control of our heirs, legal representatives or assigns which may be useful for establishing the facts of our conceptions, disclosures, and reduction to practice of said inventions and discoveries.

In testimony of which we have executed this Assignment as an instrument under seal on the dates indicated next to our names.

Dated: 8/22/03

Yuhoy Ci

State or Commonwealth of Sennsylvania
County of Thelabelphin

On this 22 day of August, 2003, before me appeared Yuhong Liu, to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she acknowledged the same to be his/her free act and deed.

My Commission Expires:

[seal]

NOTARIAL SEAL

Elizabeth A. Matthews, Notary Public City of Philadelphia, Phila. County My Commission Expires Feb. 23, 2004

Dated: 2/2013	Jahra Jia Luo	>
State or Commonwealth of Penneylor County of Philadelphen	nin	
On this 22 nd day of <u>August</u> , known and known to me to be the person de instrument, and he/she acknowledged the sa	dold before mescribed in and who exime to be his/her free	secuted the foregoing
[seal]	My Commissi	

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RECORDED: 01/15/2004