Form, PTO 1595 05-07-2001	
	FORM COVER SHEET U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office Docket No.: 7529/0F552
404705060	Please record the attached original documents or copy thereof.
1. Name of conveying party(ies):	2. Name and address of receiving party(ies):
Yongwon CHOI	Name: Howard Hughes Medical Institute
Additional name(s) of conveying party(ies) attached? [] Yes [X] No	Internal Address: 2 ()
3. Nature of conveyance: 4-19-0	Street Address: 4000 Jones Bridge Road
[X] Assignment [] Merger	City: Chevy Chase State: MD Zip: 20815-6789
[] Security Agreement [] Change of Name	
[] Other _	Additional name(s) & address(es) attached? [] Yes [X] No
Execution Date: <u>April 17, 2001</u>	EXPRESS MAIL CERTIFICATE 53599821-03 Date 41901 Laber No.
4. Application number(s) or patent number(s):	I hereby certify that, or the date indicated above, this paper of fee was deposited of the U.S. Postal Service & that it was addressed for delivery to the Assistant Commissioner for
If this document is being filed together with a new appli	cation Panes execution date of the application is:
A. Patent Application No.(s)	B. Hatent No.(s)
Serial No. 09/330,867 Filed: June 11, 1999	
Additional numbers attached? [] Yes [X] No	
5. Name and address of party to whom correspondence 6. Total number of applications and patents	
concerning document should be mailed:	involved:
Name: <u>Darby & Darby P.C.</u>	
Internal Address: Samuel S. Woodley, Ph.D.	7. Total fee (37 CFR 3.41):\$ <u>40.00</u>
Street Address: <u>805 Third Avenue, 27th Floor</u>	[X] Enclosed
	[] Authorized to be charged to deposit account
City: <u>New York</u> State: <u>New York</u> Zip: <u>10022-7513</u>	8. Deposit account number:
	<u>04-0100</u>
	(Attach duplicate copy of this page if paying by deposit account)
05/254/240 204/561 20222012/2 20222012/2 DO NOT USE 01/21/2522 40.00 05	THIS SPACE 40E
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.	
Samuel S. Woodley, Ph.D. (43,287)	5. Woodo April 19, 2001
Name of Person Signing Signature	bate
Total number of pages including cover sheet, attachments, and document:	
Mail documents to be recorded with required cover sheet information to: Commissioner of Patents & Trademarks, Box Assignments Washington, D.C. 20231	
PATENT	
REEL: 011752 FRAME: 0441	

ASSIGNMENT

Assignment made <u>Arai 17</u> 2001, by Yongwon Choi, Ph.D. a citizen of the United States, residing at 1815 John F Kennedy Blvd., Apt 2525, Philadelphia, PA 19103 ("Inventor"), to the Howard Hughes Medical Institute, a Delaware corporation, having a principal business address at 4000 Jones Bridge Road, Chevy Chase, MD 20815-6789 (the "Institute").

Recitals

WHEREAS, Inventor is an employee of the Institute and, as a condition of his employment, has signed the Agreement appended to the Institute's Statement of Policy on Intellectual Property (the "Intellectual Property Agreement");

WHEREAS, pursuant to the Intellectual Property Agreement, Inventor has agreed (a) to assign to the Institute all rights he may acquire in any invention, discovery, improvement, or other intellectual property, whether or not patentable or copyrightable, developed directly or indirectly as a result of a program of research financed by Institute funds or by funds under the control of the Institute (each a "Subject Property") and (b) to execute any agreements that may be desired by the Institute in connection with such assignment;

WHEREAS, Inventor has, with Brian WONG and Daniel BESSER invented, "Trance Activated Signal Transduction Pathways in Osteoclasts" (the "Invention"), and the Invention is a Subject Property; and

WHEREAS, Inventor seeks to make a formal assignment of his interest in the Invention to the Institute, and the Institute desires the execution of a formal assignment of all of Inventor's right, title, and interest in the Invention,

NOW, THEREFORE, in consideration of the promises contained in and the acts performed and to be performed pursuant to the Intellectual Property Agreement and of other good and valuable consideration, the receipt of which is hereby acknowledged by Inventor, Inventor agrees as follows:

1. <u>Assignment</u>. Inventor hereby assigns to the Institute his entire right, title, and interest in the Invention; any United States patent applications and all corresponding foreign patent applications which are directed to the Invention (including, without limitation, the patent application entitled "Trance Activated Signal Transduction Pathways in Osteoclasts" filed in the United States Patent and Trademark Office on June 11, 1999 and assigned serial number 09/330,867), and any and all patents issued therefrom; all United States or foreign division and continuation applications based on any of the foregoing, and any and all patents issued therefrom; and all claims which are directed to the Invention and which may be contained in continuation-in-part applications or in patents which issue therefrom.

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2. <u>Cooperation</u>. Inventor agrees to execute upon request such further assignments, documents, and other instruments as may be necessary or desirable to assign Inventor's entire right, title and interest in the Invention to the Institute and to assist The Institute (or others at the direction of the Institute) in applying for, obtaining, and enforcing patents, copyrights, or other rights in the United States and in any foreign country with respect to the Invention.

3. <u>Parties</u>. The terms and provisions of this Assignment shall inure to the benefit of the Institute and its successors and assigns and shall be binding on Inventor and his heirs, personal representatives and assigns.

4. <u>Warranty</u>. Inventor warrants and represents that he has not entered into any assignment, contract, or understanding in conflict herewith, and that there is no other person or entity whose consent is required in order for the Inventor to make the assignment contained herein.

Inventor: <u>Yongwon Choi</u>, Ph.D.

State of Pensylvania County of ______/H. A OFLPH. A

Then personally appeared before me the above-named Yongwon Choi and acknowledged that he executed the foregoing instrument as his free act and deed this $_1714$ day of ______, 2001.

M. K

NOTARIAL SEAL ANNE M. KELLY, Notary Public City of Philadelphia, Phila. County My Commission Expires Aug. 19, 2002

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RECORDED: 04/19/2001