To the Director of the U.S. Patent and 1100-1100 and 1100-	ODMA\MHODMA\iManage;420457;1	-08-2003	Docket No.: 1855.2065-0
1. Name of conveying party(ies) 1. Douglas A, Holtzman 2. John D, Sharp 3. Kevin R, Leiby 3. Nicholas Wrighton 4. Sievera Blassune 5. Yang Pan 4. Millennium Pharmaceuticals, Inc. 1. Internal Address 7. Christopher C, Fraser 8. Nicholas Wrighton 4. Sievera Blassune 7. Christopher C, Fraser 8. Nicholas Wrighton 4. Sievera Blassune 7. Christopher C, Fraser 8. Nicholas Wrighton 4. Sievera Blassune 7. Christopher C, Fraser 8. Nicholas Wrighton 4. Sievera Blassune 7. Christopher C, Fraser 8. Nicholas Wrighton 4. Sievera Blassune 7. Christopher C, Fraser 8. Nicholas Wrighton 4. Street Address: 7. Sidney Street Street Address: 7. Sidney Street City: Cambridge 8. State: MA ZIP: 02139 Additional name(s) & address(es) attached? [] Yes [X] No 2. Corbote 24, 2001 7. October 29, 2001 7. October 29, 2001 7. October 29, 2001 7. October 29, 2001 7. November 16, 2001 7. Total Fee (37 C.F.R. 3.41)	10/6/23 RECO:		HEET
1. Douglas A. Holtzman 2. John D. Sharp 3. Kevin R. Leiby 4. Sleven Bossone 9. Paul S. Myers 5. Yang Pan 10. Gillian Kingsburs 11. Gillian Kingsburs 10. Gillian Kingsburs 11. Gillian Kingsburs 12. John D. Sharp 13. Kevin R. Leiby 14. Sleven Bossone 9. Paul S. Myers 15. Yang Pan 10. Gillian Kingsburs 10. Gillian Kingsburs 10. Gillian Kingsburs 11. Gillian Kingsburs 12. John D. Street Address: 13. Sevin R. Leiby 15. Street Address: 15. Street Address: 17. Sidney Street 15. Street Address: 17. Sidney Street 16. Cambridge 17. Street Address: 17. Sidney Street 18. Street Address: 17. Sidney Street 18. Street Address: 17. Sidney Street 19. City: Cambridge 19. State: MA ZIP: 02139 19. Additional name(s) & address(es) attached? [] Yes [X] No 19. Additional name(s) & address(es) attached? [] Yes [X] No 19. Application number(s) or patent number(s): 19. A Patent Application No.(s) 19. A Patent Application No.(s) 19. A Patent Application No.(s) 19. Name and address of party to whom correspondence concerning document should be mailed: 19. Name: Helen E. Wendler, Esq. 10. Total Fee (37 C.F.R. 3.41)	To the Director of the U.S. Patent and Traucinan On	2570376	original documents or copy thereof.
2. John D. Sharp 3. Kevin R. Leiby 4. Steven Bossone 9. Paul S. Myers 5. Yang Pan 10. Gillian Kingsbury Additional name(s) of conveying party(ies) attached? [] Yes [X] No 3. Nature of conveyance: [X] Assignment [] Merger [] Security Agreement [] Change of Name [X] Other Corrected Cover Sheet Reel: 012638 Frame: 0572-0612 Execution Date: 1. October 24, 2001 2. October 24, 2001 3. October 24, 2001 3. October 24, 2001 4. October 22, 2001 5. November 16, 2001 5. November 16, 2001 10. November 16, 2001 5. November 16, 2001 10. November 16, 2001 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the upplication is: A. Patent Application No.(s) 09/796.858 Additional numbers attached? [] Yes [X] No 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the upplication is: B. Patent No.(s) 9/796.858 Additional numbers of applications and patents involved: 1] Total Fee (37 C.F.R. 3.41)	Name of conveying party(ies)	2. Name and address	of receiving party(ies)
3. Nature of conveyance: [X] Assignment [] Merger [] Security Agreement [] Change of Name [X] Other Corrected Cover Sheet Reel: 012638 Prame: 0572-0612 Execution Date: 1. October 24, 2001 2. October 24, 2001 3. October 24, 2001 3. October 24, 2001 3. October 24, 2001 5. November 16, 2001 5. November 16, 2001 10. November 16, 2001 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) 09/796,858 Additional numbers attached? [] Yes [X] No Concord State: MA ZIP: 01742-9133 [X] Enclosed [X] Authorized to charge any deficiencies or credit any overpayment to deposit account [] Authorized to be charged to deposit account [] Authorized to be charged to deposit account [] Authorized to be charged to deposit account [] Authorized to posit account [] Authorized to be charged to deposit account [] Authorized copy of this page if paying by deposit account [] Authorized copy of this page if paying by deposit account [] The best of the state and signature. To the best of the state and signature. To the best of the state of the state of the application is: Additional name(s) & address(es) attached? [] Yes [X] No Additional name(s) & address(es) attached? [] Yes [X] No [X] N	 John D. Sharp Kevin R. Leiby Steven Bossone Christopher C. Fraser Nicholas Wrighton Paul S. Myers 		harmaceuticals, Inc.
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[X] Other Corrected Cover Sheet Reel: 012638 Frame: 0572-0612 Execution Date: 1. October 24, 2001 6. October 29, 2001 2. October 24, 2001 7. October 29, 2001 3. October 24, 2001 8. October 30, 2001 4. October 22, 2001 9. October 30, 2001 5. November 16, 2001 10. November 16, 2001 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) 09/796,858 Additional numbers attached? [] Yes [X] No 6. Total number of applications and patents involved: 41] 7. Total Fee (37 C.F.R. 3.41)	[X] Assignment [] Merger		
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If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) 09/796,858 Additional numbers attached? [] Yes [X] No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Helen E. Wendler, Esq. For the length of the content of applications and patents involved: H1] 7. Total Fee (37 C.F.R. 3.41)	2. October 24, 2001 7. October 29, 2001 3. October 24, 2001 8. October 30, 2001 4. October 22, 2001 9. October 30, 2001		ress(es) attached? [] Yes [X] No
5. Name and address of party to whom correspondence concerning document should be mailed: Name: Helen E. Wendler, Esq. 7. Total Fee (37 C.F.R. 3.41)		n, the execution date of the ap	oplication is:
Internal Address: Hamilton, Brook, Smith & Reynolds, P.C. Street Address: 530 Virginia Road, P.O. Box 9133 Street Address: 530 Virginia Road, P.O. Box 9133 Street Address: 530 Virginia Road, P.O. Box 9133 Street Address: 68-0380	If this document is being filed together with a new application A. Patent Application No.(s) 09/796,858	B. Patent No.(s)	IXINO
Hamilton, Brook, Smith & Reynolds, P.C. [X] Authorized to charge any deficiencies or credit any overpayment to deposit account [] Authorized to be charged to deposit account Street Address: 530 Virginia Road, P.O. Box 9133 8. Deposit account number: 08-0380 City: Concord State: MA ZIP: 01742-9133 (Attach duplicate copy of this page if paying by deposit account) 2003 DBYRHE 00000107 097% 558 9. Statement and signature. To the best of my knowledge and belief the foregoing information is true and correct and any attached come is a true copy of the origing.	If this document is being filed together with a new application A. Patent Application No.(s) 09/796,858 Additional num 5. Name and address of party to whom correspondence	B. Patent No.(s)	[X] No
City: Concord State: MA ZIP: 01742-9133 (Attach duplicate copy of this page if paying by deposit account) /2003 DBYRNE 00000107 09796858 DO NOT USE THIS SPACE 9. Statement and signature. To the best of my knowledge and belief the forecoing information is true and correct and any attached copy is a true copy of the original programment.	If this document is being filed together with a new application A. Patent Application No.(s) 09/796,858 Additional num 5. Name and address of party to whom correspondence concerning document should be mailed:	B. Patent No.(s) abers attached? [] Yes 6. Total number of app	[X] No lications and patents involved: 11]
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To the best of my knowledge and belief the foregoing information is true and correct and any attached convis a true conv of the origina	If this document is being filed together with a new application A. Patent Application No.(s) 09/796,858 Additional num 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Helen E. Wendler, Esq. Internal Address: Hamilton, Brook, Smith & Reynolds, P.C. Street Address: 530 Virginia Road, P.O. Box 9133 City: Concord State: MA ZIP: 01742-9133	B. Patent No.(s) Fig. 1 Fig. 1 Fig. 1 Fig. 1 Fig. 2 Fig. 1 Fig. 2 Fig. 1 Fig. 2 Fig.	[X] No lications and patents involved: L1] 3.41)
Name of Person Signing Signature Date	If this document is being filed together with a new application A. Patent Application No.(s) 09/796,858 Additional num 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Helen E. Wendler, Esq. Internal Address: Hamilton, Brook, Smith & Reynolds, P.C. Street Address: 530 Virginia Road, P.O. Box 9133 City: Concord State: MA ZIP: 01742-9133 /2003 DBYRNE 00000107 09796858	B. Patent No.(s) Fig. 1 Fig. 1 Fig. 1 Fig. 2 Fig. 2 Fig. 2 Fig. 2 Fig. 3 Fig. 4 Fig. 2 Fig. 3 Fig. 2 Fig.	[X] No lications and patents involved: 11] 3.41)
	If this document is being filed together with a new application A. Patent Application No.(s) 09/796,858 Additional num 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Helen E. Wendler, Esq. Internal Address: Hamilton, Brook, Smith & Reynolds, P.C. Street Address: 530 Virginia Road, P.O. Box 9133 City: Concord State: MA ZIP: 01742-9133 /2003 DBYRNE 00000107 09796858 Statement and signature. To the best of my knowledge and belief the foregoing inform	B. Patent No.(s) Fig. 1. Section 1. S	[X] No lications and patents involved: 11] 3.41)

PATENT REEL: 014571 FRAME: 0621

OIP'E \ 2-	25.02 D:
FEB 2 2 222	Express Mail Number: EL 501 742 263 US
,	Attorney Docket Number 7853-226-999 FRADEMARKS Signment 1, De 20231 The documents or copy thereof.
Name of conveying party(ies):	2. Name and address of receiving party(ies):
Douglas A. Holtzman John D. Sharp Kevin R. Leiby Steven Bossone Yang Pan Christopher C. Fraser Nicholas Wright Paul S. Myers Gillian Kingsbury Additional name(s) of conveying party(ies) attached? □ Yes ⋈ No	Name: Millennium Pharmaceuticals, Inc. Address: 75 Sidney Street Cambridge, Massachusetts 02139 Country (if other than USA):
Nature of conveyance:	
□ Assignment □ Change of Name □ Change of Name □ Other Execution Date: October 24, 2001 October 29, 2001 October 24, 2001 October 29, 2001 October 24, 2001 October 30, 2001 October 22, 2001 October 30, 2001 November 16, 2001 November 16, 2001, respectively 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution A. Patent Application No.(s) 09/796,858 filed March 1, 2001	on date of the application is: B. Patent No.(s) ttached? □ Yes ☒ No 6. Number of applications and patents involved: One 7. Total fee (37 CFR 3.41):\$ _40.00 Please charge to the deposit account listed in Section 8. 8. Deposit account number: 16-1150
DO NOT USI	E THIS SPACE
9. Statement and signature. To the best of my knowledge and belief, the foregoing information is to document. A. C	00.59
	February 22, 2002 Date Ses (including cover sheet with duplicate): 10. June 10. J
Mail documents to be recorded with 8/2002 GTON11 00000142 161150 09796858 Commissioner of Patents & Total Washington C:581 40.00 CH	Trademarks, Box Assignment

NY2 - 1284886.1

WHEREAS, WE, Douglas A. Holtzman (a citizen of the United States, residing at 821 Centre Street, #6, Jamaica Plain, MA 02130); John D. Sharp (a citizen of the United States, residing at 245 Park Avenue, Arlington, MA 02476); Kevin R. Leiby (a citizen of the United States, residing at 4 Showhegan Way, Natick, MA 01760); Steven Bossone (a citizen of the United States, residing at 91 Bacon Street, Winchester, MA 01890); Yang Pan (a citizen of the People's Republic of China, residing 5308 135th Place SE, Bellevue, WA 98006); Thomas M. Barnes (a citizen of Australia, residing at 22 Hanson St. #2, Boston, MA 02118); Christopher C. Fraser (a citizen of the United States, residing at 52 Grassland Street, Lexington, MA 02421); Nicholas Wrighton (a citizen of the United Kingdom, residing at 18 Lloyd Street, Winchester, MA 01890); Paul S. Myers (a citizen of the United States, residing at 171 South Street, Unit 17A, Jamaica Plain, MA 02130); and Gillian Kingsbury (a citizen of the United Kingdom, residing at 23 Fletcher Street, Roslindale, MA 02131), ASSIGNORS, are the inventors of the United Kingdom, residing at 23 Fletcher Street, Roslindale, MA 02131), ASSIGNORS, are the inventors of the invention in NOVEL GENES ENCODING PROTEINS HAVING PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC, AND OTHER USES for which we have executed an application for a Patent of the United States

which is executed on \square even date herewith or \square

 \boxtimes which is identified by Pennie & Edmonds LLP docket no. 7853-226-999

which was filed on March 1, 2001, Application No. 09/796,858

and WHEREAS, Millennium Pharmaceuticals, Inc., ASSIGNEE is desirous of obtaining our entire right, title and interest in, to and under the said invention and the said application:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other interior and industrial property and the International Convention of Industrial Property, or any other interior and industrial property and including the International Convention of Industrial Property, or any other interior and industrial property and including the International Convention of Industrial Property, or any other interior and interior of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

AND WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant and agree that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

IN TESTIMONY WHEREOF, We hereunto set our hands and seals the day and year set opposite our respective signatures.

76/34,2001

State of Massarchuse HS

County of Middlesex SS.:

On Oct. 24, 2001, before me, Simenne Calliveau, Notary Public, personally appeared DOUGLAS A. HOLTZMAN, personally known to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed

My Commission expires: 9/1/2006

PATENT NY2 - 1249825.1 REEL: 014571 FRAME: 0623

Date	, 2001	L.S.
	JOHN D. SHARP	
State of)		
County of) SS.	:	
On		, Notary Public,
personally appeared JOHN D. S name is subscribed to the within	SHARP, personally known to me on the basis of satisfactory evidence to instrument and acknowledged to me that he executed the same in his authorithm person, or the entity upon behalf of which the person acted, ex	to be the person whose thorized capacity, and
WITNESS my hand an	nd official seal	
		
Date	, 2001	L.S.
	KEVIN R. LEIBY	
State of)		
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personally appeared KEVIN R. name is subscribed to the within	, 2001, before me,	thorized capacity, and
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D		T. G.
Date	, 2001 STEVEN BOSSONE	L.S.
State of) SS.		
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capacity, and that by his signatur the instrument.	, 2001, before me, BOSSONE, personally known to me on the basis of satisfactory evid the within instrument and acknowledged to me that he executed the second the instrument the person, or the entity upon behalf of which the person the instrument the person or the entity upon behalf of which the person that the person is the entity upon behalf of which the entity upon the en	, Notary Public, ence to be the person ame in his authorized person acted, executed
WITNESS my hand and	d official seal	

Date	, 2001		L.S.
		YANG PAN	
Date	, 2001	Witnessed by	
Data	2001	witnessed by	
Date	, 2001	Witnessed by	
Date	, 2001		L.S.
Date	, 2001	THOMAS M. BARNES	D.O.
State of)			
County of) SS.:		
-	2001	hafara ma	, Notary Public,
personally appeared TH	OMAS M. BARN	before me,	satisfactory evidence to be the person
whose name is subscrib	ed to the within in	nstrument and acknowledged to me that he	executed the same in his authorized
capacity, and that by his the instrument.	signature on the in	strument the person, or the entity upon beha	lf of which the person acted, executed
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Date	, 2001	CHRISTOPHER C. FRASER	L.S.
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On nersonally appeared CH	, 2001, 1	pefore me,	, Notary Public,
person whose name is su	bscribed to the with	in instrument and acknowledged to me that	he executed the same in his authorized
capacity, and that by his the instrument.	signature on the in	strument the person, or the entity upon behal	If of which the person acted, executed
WITNESS my	hand and official s	eal	
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Date	, 2001	L.S.
	NICHOLAS WRIGHTON	
State of)		
County of) SS.:		
•	001 before me	Notary Public
personally appeared NICHOLAS We whose name is subscribed to the we capacity, and that by his signature of the instrument.	201, before me,	to be the person n his authorized acted, executed
WITNESS my hand and of	ficial seal	
Date	. 2001	L.S.
	PAUL S. MYERS	
State of)		
County of) SS.:		
· · · · · · · · · · · · · · · · · · ·	2001, before me,,	Notary Public,
personally appeared PAUL S. MYE name is subscribed to the within instr	RS, personally known to me on the basis of satisfactory evidence to be the transport of the person, or the entity upon behalf of which the person acted, executed	ne person whose ed capacity, and
WITNESS my hand and of	ficial seal	
Date	2001	L.S.
Date	GILLIAN KINGSBURY	L.G.
State of)		
) SS.:		
County of)	2004 1 6	27 . 22 11:
whose name is subscribed to the wir	GSBURY, personally known to me on the basis of satisfactory evidence thin instrument and acknowledged to me that she executed the same in the instrument the person, or the entity upon behalf of which the person	n her authorized
WITNESS my hand and of	ficial seal	
		

WHEREAS, WE, Douglas A. Holtzman (a citizen of the United States, residing at 821 Centre Street, #6, Jamaica Plain, MA 02130); John D. Sharp (a citizen of the United States, residing at 245 Park Avenue, Arlington, MA 02476); Kevin R. Leiby (a citizen of the United States, residing at 4 Showhegan Way, Natick, MA 01760); Steven Bossone (a citizen of the United States, residing at 91 Bacon Street, Winchester, MA 01890); Yang Pan (a citizen of the People's Republic of China, residing 5308 135 th Place SE, Bellevue, WA 98006); Thomas M. Barnes (a citizen of Australia, residing at 22 Hanson St. #2, Boston, MA 02118); Christopher C. Fraser (a citizen of the United States, residing at 52 Grassland Street, Lexington, MA 02421); Nicholas Wrighton (a citizen of the United Kingdom, residing at 18 Lloyd Street, Winchester, MA 01890); Paul S. Myers (a citizen of the United States, residing at 171 South Street, Unit 17A, Jamaica Plain, MA 02130); and Gillian Kingsbury (a citizen of the United Kingdom, residing at 23 Fletcher Street, Roslindale, MA 02131), ASSIGNORS, are the inventors of the invention in NOVEL GENES ENCODING PROTEINS HAVING PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC, AND OTHER USES for which we have executed an application for a Patent of the United States
which is executed on □ even date herewith or □ which is identified by Pennie & Edmonds LLP docket no. 7853-226-999 which was filed on March 1, 2001, Application No. 09/796,858
and WHEREAS, Millennium Pharmaceuticals, Inc., ASSIGNEE is desirous of obtaining our entire right, title and interest in, to and under the said invention and the said application:
NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;
AND WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.
AND WE HEREBY covenant and agree that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.
AND WE HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.
IN TESTIMONY WHEREOF, We hereunto set our hands and seals the day and year set opposite our respective signatures.
Date, 2001L.S.
State of) SS.:
County of)
On

PATEN 12 - 1249825.1
REEL: 014571 FRAME: 0627

WITNESS my hand and official seal

Date Oct. 24, 2001, 2001	John D. Shapp L.S.
State of Massachusetts County of Middlisus SS.:	
personally appeared JOHN D. SHARP, per name is subscribed to the within instrument a	efore me, <u>Simonne CORRIVEGU</u> , Notary Public, sonally known to me on the basis of satisfactory evidence to be the person whose and acknowledged to me that he executed the same in his authorized capacity, and rson, or the entity upon behalf of which the person acted, executed the instrument.
WITNESS my hand and official se	al
My Commission expires:	9/1/2000
Date, 2001	L.S.
State of)	
County of SS.:	
name is subscribed to the within instrument a	efore me,, Notary Public, sonally known to me on the basis of satisfactory evidence to be the person whose and acknowledged to me that he executed the same in his authorized capacity, and arson, or the entity upon behalf of which the person acted, executed the instrument.
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Date . 2001	L.S.
	STEVEN BOSSONE
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Date	_, 2001	L.S. YANG PAN
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Date	_, 2001	L.S. THOMAS M. BARNES
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Date	, 2001	L.S.
		CHRISTOPHER C. FRASER
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Date	, 200	PAUL S. MYERS	L.S.
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personally appeared whose name is subso	GILLIAN KINGSI cribed to the within	nstrument and acknowledged to me ti	Notary Public, passis of satisfactory evidence to be the person that she executed the same in her authorized on behalf of which the person acted, executed
WITNESS	my hand and officia	seal	

WHEREAS, WE, Douglas A. Holtzman (a citizen of the United States, residing at 821 Centre Street, #6, Jamaica Plain, MA 02130); John D. Sharp (a citizen of the United States, residing at 245 Park Avenue, Arlington, MA 02476); Kevin R. Leiby (a citizen of the United States, residing at 4 Showhegan Way, Natick, MA 01760); Steven Bossone (a citizen of the United States, residing at 91 Bacon Street, Winchester, MA 01890); Yang Pan (a citizen of the People's Republic of China, residing 5308 135 th Place SE, Bellevue, WA 98006); Thomas M. Barnes (a citizen of Australia, residing at 22 Hanson St. #2, Boston, MA 02118); Christopher C. Fraser (a citizen of the United States, residing at 52 Grassland Street, Lexington, MA 02421); Nicholas Wrighton (a citizen of the United Kingdom, residing at 18 Lloyd Street, Winchester, MA 01890); Paul S. Myers (a citizen of the United States, residing at 171 South Street, Unit 17A, Jamaica Plain, MA 02130); and Gillian Kingsbury (a citizen of the United Kingdom, residing at 23 Fletcher Street, Roslindale, MA 02131), ASSIGNORS, are the inventors of the invention in NOVEL GENES ENCODING PROTEINS HAVING PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC, AND OTHER USES for which we have executed an application for a Patent of the United States
 □ which is executed on □ even date herewith or □ which is identified by Pennie & Edmonds LLP docket no. 7853-226-999 which was filed on March 1, 2001, Application No. 09/796,858
and WHEREAS, Millennium Pharmaceuticals, Inc., ASSIGNEE is desirous of obtaining our entire right, title and interest in, to and under the said invention and the said application:
NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;
AND WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.
AND WE HEREBY covenant and agree that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.
AND WE HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.
IN TESTIMONY WHEREOF, We hereunto set our hands and seals the day and year set opposite our respective signatures.
Date, 2001L.S
State of) SS.:
County of)
On

PATENTY2-1249825.1
REEL: 014571 FRAME: 0631

WITNESS my hand and official seal

Date	, 2001 TOUND	CILADD		L.S.
	JOHN D.	SHARP		
State of)				
County of) SS.:				
On	trument and acknowle	edged to me that he c	executed the same in his	s authorized capacity, and
WITNESS my hand and o	official seal			
			, 'n —	
Date	_, 2001 KEVIN R.	LEIBY LEIBY	elf	L.S.
State of Massachusetts				
County of Middle sey SS.:				
on Oct. 344 personally appeared KEVIN R. LE name is subscribed to the within insthat by his signature on the instrume	IBY, personally know trument and acknowle nt the person, or the e	wn to me on the basis edged to me that he e ntity upon behalf of v	s of satisfactory evidence executed the same in his	authorized capacity, and
WITNESS my hand and o	fficial seal			
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	STEVEN E	BOSSONE		
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On	min modulient and	acknowledged to n	ie mai ne executed me	same in ins aumorized
WITNESS my hand and or	fficial seal			

Date	_, 2001	L.S. YANG PAN
Date	_, 2001	Witnessed by
Date	_, 2001	Witnessed by
		witnessed by
Date	. 2001	L.S.
Date	_, 2001	THOMAS M. BARNES
State of)		
County of) SS.:		
On	, 2001, E	pefore me,, Notary Public,
whose name is subscribed to the	within in	ES, personally known to me on the basis of satisfactory evidence to be the person istrument and acknowledged to me that he executed the same in his authorized strument the person, or the entity upon behalf of which the person acted, executed
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.	2001	L.S.
Date	_, 2001	CHRISTOPHER C. FRASER
State of)		
County of) SS.:		
On	, 2001, Ł	perfore me,, Notary Public, FRASER, personally known to me on the basis of satisfactory evidence to be the
person whose name is subscribed to	the with	FRASER, personally known to me on the basis of satisfactory evidence to be the in instrument and acknowledged to me that he executed the same in his authorized strument the person, or the entity upon behalf of which the person acted, executed
WITNESS my hand and	official s	eal

Date, 2001L.S. NICHOLAS WRIGHTON
State of)
County of
On, 2001, before me,
WITNESS my hand and official seal
Date 2001L.S.
PAUL S. MYERS
State of) County of) SS.:
On
WITNESS my hand and official seal
Date, 2001L.SL.S.
State of)
) SS.: County of
On
WITNESS my hand and official seal

WHEREAS, WE, Douglas A. Holtzman (a citizen of the United States, residing at 821 Centre Street, #6, Jamaica
Plain, MA 02130); John D. Sharp (a citizen of the United States, residing at 245 Park Avenue, Arlington, MA 02476); Kevin
R. Leiby (a citizen of the United States, residing at 4 Showhegan Way, Natick, MA 01760); Steven Bossone (a citizen of the
United States, residing at 91 Bacon Street, Winchester, MA 01890); Yang Pan (a citizen of the People's Republic of China,
residing 5308 135th Place SE, Bellevue, WA 98006); Thomas M. Barnes (a citizen of Australia, residing at 22 Hanson St. #2,
Boston, MA 02118); Christopher C. Fraser (a citizen of the United States, residing at 52 Grassland Street, Lexington, MA
02421); Nicholas Wrighton (a citizen of the United Kingdom, residing at 18 Lloyd Street, Winchester, MA 01890); Paul S.
Myers (a citizen of the United States, residing at 171 South Street, Unit 17A, Jamaica Plain, MA 02130); and Gillian
Kingsbury (a citizen of the United Kingdom, residing at 23 Fletcher Street, Roslindale, MA 02131), ASSIGNORS, are the
inventors of the invention in NOVEL GENES ENCODING PROTEINS HAVING PROGNOSTIC, DIAGNOSTIC, PREVENTIVE,
THERAPEUTIC, AND OTHER USES for which we have executed an application for a Patent of the United States
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□ which is executed on □ even date herewith or □ which is identified by Pennie & Edmonds LLP docket no. 7853-226-999 which was filed on March 1, 2001, Application No. 09/796,858

and WHEREAS, Millennium Pharmaceuticals, Inc., ASSIGNEE is desirous of obtaining our entire right, title and interest in, to and under the said invention and the said application:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

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AND WE HEREBY covenant and agree that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

IN TESTIMONY WHEREOF, We hereunto set our hands and seals the day and year set opposite our respective signatures.

Date	, 2001 <u>DOUGLAS A. H</u>	L.S.
State of) County of) SS.:	
person whose name is	subscribed to the within instrument and ac	, Notary Public, known to me on the basis of satisfactory evidence to be the knowledged to me that he executed the same in his authorized or the entity upon behalf of which the person acted, executed
WITNESS m	ny hand and official seal	

PATENT NY2 - 1249825.1

Date	, 2001	JOHN D. SHARP		L.S.
State of)) SS.:			
County of)			
personally appeared name is subscribed	d JOHN D. SHARP, pe to the within instrument	and acknowledged to me	he basis of satisfactory evidence that he executed the same in his authors half of which the person acted, ex	ithorized capacity, and
WITNESS	S my hand and official s	eal		
Date	, 2001			L.S.
		KEVIN R. LEIBY		
State of) County of) SS.:			
	2001 1	pefore me,		, Notary Public,
personally appeared name is subscribed	d KEVIN R. LEIBY, per to the within instrument	rsonally known to me on t and acknowledged to me t	he basis of satisfactory evidence t hat he executed the same in his au half of which the person acted, ex	to be the person whose thorized capacity, and
WITNESS	my hand and official s	eal		
Date OCHNL	<u>22</u> , 2001	STEVEN BOSSONE		L.S.
State of Masy:	acheesetts			
County of Most	alesed			
On 10/2 personally appeared whose name is sub capacity, and that by the instrument.	, 2001, be. 1 STEVEN BOSSONE scribed to the within in y his signature on the ins	fore me, <u>Simonine</u> , personally known to me strument and acknowledge trument the person, or the	on the basis of satisfactory evided to me that he executed the satisfactory upon behalf of which the p	, Notary Public, ence to be the person ame in his authorized person acted, executed
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Date	, 2001	L.S.
		YANG PAN
Date	, 2001	Witnessed by
Data	2001	witnessed by
Date	, 2001	Witnessed by
Date	, 2001	L.S.
		THOMAS M. BARNES
State of)		
County of) S	S.:	
-	. 2001. b	efore me,, Notary Public,
personally appeared THOMA	S M. BARNE	ES, personally known to me on the basis of satisfactory evidence to be the person
whose name is subscribed to	the within ins	strument and acknowledged to me that he executed the same in his authorized
capacity, and that by his signat the instrument.	ure on the ins	trument the person, or the entity upon behalf of which the person acted, executed
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	, = 0 0 1	CHRISTOPHER C. FRASER
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On	, 2001, b	efore me,, Notary Public,
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person whose name is subscribe capacity, and that by his signat the instrument.	ed to the withi ure on the ins	in instrument and acknowledged to me that he executed the same in his authorized trument the person, or the entity upon behalf of which the person acted, executed
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Date	, 2001 PAUL S	. MYERS	L.S.
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personally appeared PA name is subscribed to the	.UL S. MYERS, personally kn e within instrument and acknow	own to me on the basis of satisfactory wledged to me that he executed the same entity upon behalf of which the person	me in his authorized capacity, and
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	GILLIA	N KINGSBURY	
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whose name is subscrib	ed to the within instrument an	nally known to me on the basis of satis ad acknowledged to me that she exec e person, or the entity upon behalf of	cuted the same in her authorized
WITNESS my	hand and official seal		

WHEREAS, WE, Douglas A. Holtzman (a citizen of the United States, residing at 821 Centre Street, #6, Jamaica
Plain, MA 02130); John D. Sharp (a citizen of the United States, residing at 245 Park Avenue, Arlington, MA 02476); Kevin
R. Leiby (a citizen of the United States, residing at 4 Showhegan Way, Natick, MA 01760); Steven Bossone (a citizen of the
United States, residing at 91 Bacon Street, Winchester, MA 01890); Yang Pan (a citizen of the People's Republic of China,
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Boston, MA 02118); Christopher C. Fraser (a citizen of the United States, residing at 52 Grassland Street, Lexington, MA
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inventors of the invention in NOVEL GENES ENCODING PROTEINS HAVING PROGNOSTIC, DIAGNOSTIC, PREVENTIVE,
THERAPEUTIC, AND OTHER USES for which we have executed an application for a Patent of the United States

□ which is executed on □ even date herewith or □ which is identified by Pennie & Edmonds LLP docket no. 7853-226-999

which was filed on March 1, 2001, Application No. 09/796,858

and WHEREAS, Millennium Pharmaceuticals, Inc., ASSIGNEE is desirous of obtaining our entire right, title and interest in, to and under the said invention and the said application:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

AND WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant and agree that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

IN TESTIMONY WHEREOF, We hereunto set our hands and seals the day and year set opposite our respective signatures.

Date	, 200	DOUGLAS A. H	OT TOWAR		L.S.
		DOUGLAS A. H	OL I ZWAN		
State of)				
County of) SS.:)				
person whose	peared DOUGLAS A. HO e name is subscribed to the w that by his signature on the nt.	ithin instrument and ac	knowledged to me that I	he executed the same i	in his authorized
WI	TNESS my hand and official	seal			

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PATENTNY2 - 1249825.1

Date		, 2001		L.S.
		JOHN D. SH	ARP	
State of)			
County of) SS.:			
On		, 2001, before me,	, No	tary Public,
name is subs	ppeared JOHN D. SH scribed to the within in	ARP, personally known strument and acknowled	to me on the basis of satisfactory evidence to be the pe ged to me that he executed the same in his authorized ca ty upon behalf of which the person acted, executed the	erson whose apacity, and
WI	TNESS my hand and	official seal		
Date		, 2001 <u>KEVIN R. L</u>	FIDV	L.S.
		REVIN K. E	CIDI	
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County of) SS.:			
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name is subs	cribed to the within ins	strument and acknowledg	, No to me on the basis of satisfactory evidence to be the pered to me that he executed the same in his authorized carry upon behalf of which the person acted, executed the	apacity, and
	TNESS my hand and o			
Date		_, 2001 <u>STEVEN BO</u>	SSONF	L.S.
		572,21,20		
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WI	TNESS my hand and o	official seal		

Date	, 2001	YANG PAN L.S.
Date 11/16/07	, 2001	Witnessed by
Date <u>[[///</u> 0]	, 2001	W = G.2 Witnessed by
Date	, 2001	THOMAS M. BARNES
State of) County of) SS.:		
personally appeared THOMAS M. whose name is subscribed to the w	BARNI ithin in	efore me,, Notary Public, ES, personally known to me on the basis of satisfactory evidence to be the person strument and acknowledged to me that he executed the same in his authorized strument the person, or the entity upon behalf of which the person acted, executed
WITNESS my hand and or	fficial se	eal
Date	, 2001	L.S. CHRISTOPHER C. FRASER
State of)		
State of) County of) SS.:		
On, personally appeared CHRISTOPH person whose name is subscribed to the	ER C. F he with	efore me,, Notary Public, FRASER, personally known to me on the basis of satisfactory evidence to be the in instrument and acknowledged to me that he executed the same in his authorized trument the person, or the entity upon behalf of which the person acted, executed

NICHOLAS WRIGHTON
State of) County of) SS.:
On, 2001, before me,, Notary Public, personally appeared NICHOLAS WRIGHTON, personally known to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.
WITNESS my hand and official seal
Date
PAUL S. MYERS
State of) County of) SS.:
On, Notary Public, personally appeared PAUL S. MYERS, personally known to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument. WITNESS my hand and official seal
Date 2001 L.S.
Date, 2001L.SL.S.
State of) County of) SS.:
On
WITNESS my hand and official seal

WHEREAS, WE, Douglas A. Holtzman (a citizen of the United States, residing at 821 Centre Street, #6, Jamaica Plain, MA 02130); John D. Sharp (a citizen of the United States, residing at 245 Park Avenue, Arlington, MA 02476); Kevin R. Leiby (a citizen of the United States, residing at 4 Showhegan Way, Natick, MA 01760); Steven Bossone (a citizen of the United States, residing at 91 Bacon Street, Winchester, MA 01890); Yang Pan (a citizen of the People's Republic of China, residing 5308 135th Place SE, Bellevue, WA 98006); Thomas M. Barnes (a citizen of Australia, residing at 22 Hanson St. #2, 602421); Nicholas Wrighton (a citizen of the United States, residing at 18 Lloyd Street, Winchester, MA 01890); Paul S. Myers (a citizen of the United States, residing at 171 South Street, Unit 17A, Jamaica Plain, MA 02130); and Gillian Kingsbury (a citizen of the United Kingdom, residing at 23 Fletcher Street, Roslindale, MA 02131), ASSIGNORS, are the inventors of the invention in NOVEL GENES ENCODING PROTEINS HAVING PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC, AND OTHER USES for which we have executed an application for a Patent of the United States	12 Mason Teri. T3. 10/26/c
□ which is executed on □ even date herewith or □ which is identified by Pennie & Edmonds LLP docket no. 7853-226-999 which was filed on March 1, 2001, Application No. 09/796,858	
and WHEREAS, Millennium Pharmaceuticals, Inc., ASSIGNEE is desirous of obtaining our entire right, title and interest in, to and under the said invention and the said application:	
NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;	
AND WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.	
AND WE HEREBY covenant and agree that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.	
AND WE HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.	
IN TESTIMONY WHEREOF, We hereunto set our hands and seals the day and year set opposite our respective signatures.	
Date	
DOUGLAS A. HOLTZMAN	
State of) SS.:	
County of) SS.:	
On, 2001, before me,	
WITNESS my hand and official seal	

PATENT - 1249825.1 REEL: 014571 FRAME: 0643

Date	, 200	\ 	L.S.
		JOHN D. SHARP	
State of)) SS.:		
County of) 33		
On	, 2001,	before me,	, Notary Public, ne basis of satisfactory evidence to be the person whose
personally appeared a	JOHN D. SHARP, p	ersonally known to me on the	ne basis of satisfactory evidence to be the person whose that he executed the same in his authorized capacity, and
that by his signature o	on the instrument the	person, or the entity upon bel	half of which the person acted, executed the instrument.
	ny hand and official	•	
	,		
			
Date	, 2001	KEVIN R. LEIBY	L.S.
		KE VIIV K. LEIDI	
State of)			
County of) SS.:		
On	2001	hefore me	Notary Public
personally appeared F	KEVIN R. LEIBY, p	ersonally known to me on th	, Notary Public, ne basis of satisfactory evidence to be the person whose
name is subscribed to	the within instrumen	t and acknowledged to me th	at he executed the same in his authorized capacity, and alf of which the person acted, executed the instrument.
			an of which the person acted, executed the instrument.
WITNESS n	ny hand and official:	seal	
Date	, 2001	STEVEN BOSSONE	L.S.
State of)) 00		
County of) SS.:)		
On	. 2001. be	fore me.	Notary Public
personally appeared S	TEVEN BOSSONE	, personally known to me o	, Notary Public, on the basis of satisfactory evidence to be the person
capacity, and that by h	is signature on the in	strument the person, or the e	d to me that he executed the same in his authorized ntity upon behalf of which the person acted, executed
he instrument.			
WITNESS m	y hand and official s	eal	

Date	, 2001	YANG PAN	L.S.
Date	, 2001	Witnessed by	
Date	, 2001	Witnessed by	
Date	, 2001	THOMAS M. BARNES	L.S.
State of Musinghusets County of Muddeney SS.:			
On October 29 personally appeared THOMAS N whose name is subscribed to the	_, 2001, b 1. BARN within in	pefore me, Simonne Corriverus ES, personally known to me on the basis of satisfactory evide astrument and acknowledged to me that he executed the san strument the person, or the entity upon behalf of which the person	nce to be the person ne in his authorized
WITNESS my hand and	official s	eal	
My Gennissien expl	pes: 9/	1:/200Cm	
Date	, 2001	CHRISTOPHER C. FRASER	L.S.
State of) County of) SS.:			
person whose name is subscribed t	o the with	perfore me,	me in his authorized
WITNESS my hand and	official s	eal	

Date	, 2001	L.S.
	NICHOLAS WRIGHTON	
State of)		
County of SS.:		
On, 2 personally appeared NICHOLAS W whose name is subscribed to the w capacity, and that by his signature of the instrument.	001, before me, VRIGHTON, personally known to me on the basis of satisfactory evidence to within instrument and acknowledged to me that he executed the same in a notice that the person, or the entity upon behalf of which the person a	Notary Public, o be the person his authorized cted, executed
WITNESS my hand and of	fficial seal	

Date	, 2001 PAUL S. MYERS	L.S.
	FAUL S. WIERS	
State of)		
County of) SS.:		
On PAULS MYE	, 2001, before me,, News. Personally known to me on the basis of satisfactory evidence to be the	Jotary Public,
name is subscribed to the within instr	rument and acknowledged to me that he executed the same in his authorized at the person, or the entity upon behalf of which the person acted, executed the	capacity, and
WITNESS my hand and of		
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Date	. 2001	L.S.
	GILLIAN KINGSBURY	D.O.
State of)		
County of SS.:		
•	2001 before me	otam Public
whose name is subscribed to the wit	2001, before me,	er authorized
WITNESS my hand and off	ficial seal	

ASSIGNMENT Chis for Oct 29,200,

WHEREAS, WE, Douglas A. Holtzman (a citizen of the United States, residing at 821 Centre Street, #6, Jamaica Plain, MA 02130); John D. Sharp (a citizen of the United States, residing at 245 Park Avenue, Arlington, MA 02476); Kevin R. Leiby (a citizen of the United States, residing at 4 Showhegan Way, Natick, MA 01760); Steven Bossone (a citizen of the United States, residing at 91 Bacon Street, Winchester, MA 01890); Yang Pan (a citizen of the People's Republic of China, residing 5308 135th Place SE, Bellevue, WA 98006); Thomas M. Barnes (a citizen of Australia, residing at 22 Hanson St. #2, Boston, MA 02118); Christopher C. Fraser (a citizen of the United States, residing at 52 Crassland Street, Lexington, MA 02421); Nicholas Wrighton (a citizen of the United Kingdom, residing at 18 Lloyd Street, Winchester, MA 01890); Paul S. Myers (a citizen of the United States, residing at 171 South Street, Unit 17A, Jamaica Plain, MA 02130); and Gillian Kingsbury (a citizen of the United Kingdom, residing at 23 Fletcher Street, Roslindale, MA 02131), ASSIGNORS, are the inventors of the invention in NOVEL GENES ENCODING PROTEINS HAVING PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC, AND OTHER USES for which we have executed an application for a Patent of the United States

	which is executed on □ even date herewith or □
\boxtimes	which is identified by Pennie & Edmonds LLP docket no. 7853-226-999
X	which was filed on March 1, 2001, Application No. 09/796,858

and WHEREAS, Millennium Pharmaceuticals, Inc., ASSIGNEE is desirous of obtaining our entire right, title and interest in, to and under the said invention and the said application:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

AND WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant and agree that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

IN TESTIMONY WHEREOF, We hereunto set our hands and seals the day and year set opposite our respective signatures.

Date	, 2001	L.S
	DOUGLAS A. HOLTZMAN	
State of	´) SS.:	
County	y of)	
person capacit	On, 2001, before me,	the same in his authorized
	WITNESS my hand and official seal	

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PATENT 1249825.1

Date	, 2001	L.S.
	JOHN D. SHARP	
State of)) gg .	
County of) SS.:)	
	, 2001, before me,,	Notary Public,
personally appeared JOHN name is subscribed to the wi	D. SHARP, personally known to me on the basis of satisfactory evidence to be the ithin instrument and acknowledged to me that he executed the same in his authorized instrument the person, or the entity upon behalf of which the person acted, executed the same in the person acted.	d capacity, and
WITNESS my han	nd and official seal	
Date	. 2001	L.S.
	KEVIN R. LEIBY	
S		
State of)) SS.:	
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personally appeared KEVI N name is subscribed to the wi	, 2001, before me, NR. LEIBY, personally known to me on the basis of satisfactory evidence to be the ithin instrument and acknowledged to me that he executed the same in his authorized instrument the person, or the entity upon behalf of which the person acted, executed to	d capacity, and
WITNESS my han	nd and official seal	
Date	. 2001	L.S.
	STEVEN BOSSONE	
State of)) SS.:	
County of)		
whose name is subscribed t	, 2001, before me,, EN BOSSONE, personally known to me on the basis of satisfactory evidence to to the within instrument and acknowledged to me that he executed the same in nature on the instrument the person, or the entity upon behalf of which the person a	his authorized
WITNESS my han	nd and official seal	

Date	, 2001	L.S.
		YANG PAN
Date	, 2001	
	, 2001	Witnessed by
Date	, 2001	
		Witnessed by
Date	, 2001	THOMAS M. BARNES
		I HOMAS M. DARVES
State of)		
County of SS.:		
· ·	2001 h	efore me,, Notary Public,
personally appeared THOMAS M.	BARNE	efore me,, Notary Public, ES, personally known to me on the basis of satisfactory evidence to be the person
whose name is subscribed to the w	ithin ins	strument and acknowledged to me that he executed the same in his authorized
capacity, and that by his signature of the instrument.	n the ins	trument the person, or the entity upon behalf of which the person acted, executed
WITNESS my hand and of	ficial se	al
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\wedge .		
0 () 19 200		
Date UK 05 CI COST	, 2001	CHRISTOPHER C. FRASER
State of Massychusetts		
County of Middlesex SS.:		
On Oct. 29	2001. he	efore me, Simonne CORRIVEAU , Notary Public,
personally appeared CHRISTOPHI	ER C. F	RASER, personally known to me on the basis of satisfactory evidence to be the
person whose name is subscribed to the	he withi	n instrument and acknowledged to me that he executed the same in his authorized
the instrument.	i the inst	rument the person, or the entity upon behalf of which the person acted, executed
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Simonal Jusu	cae	<u></u>
My Commission exp	risis	: 9/1/2000
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Date	2001	L.S.
	NICHOLAS WRIGHTON	
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County of)		
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Date	2001	L.S.
	PAUL S. MYERS	
State of)		
County of) SS.:		
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on, personally appeared PAIII.S MYE	2001, before me,	, Notary Public,
name is subscribed to the within instr	ment and acknowledged to me that he executed the	same in his authorized capacity, and
that by his signature on the instrumen	the person, or the entity upon behalf of which the p	erson acted, executed the instrument.
WITNESS my hand and of	icial seal	
Date,	2001	L.S.
	GILLIAN KINGSBURY	
State of)		
County of) SS.:		
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whose name is subscribed to the with	Oo1, before me,	executed the same in her authorized
WITNESS my hand and off	cial seal	
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WHEREAS, WE, Douglas A. Holtzman (a citizen of the United States, residing at 821 Centre Street, #6, Jamaicz Plain, MA 02130); John D. Sharp (a citizen of the United States, residing at 245 Park Avenue, Arlington, MA 02476); Kevin R. Leiby (a citizen of the United States, residing at 4 Showhegan Way, Natick, MA 01760); Steven Bossone (a citizen of the United States, residing at 91 Bacon Street, Winchester, MA 01890); Yang Pan (a citizen of the People's Republic of China residing 5308 135th Place SE, Bellevue, WA 98006); Thomas M. Barnes (a citizen of Australia, residing at 22 Hanson St. #2 Boston, MA 02118); Christopher C. Fraser (a citizen of the United States, residing at 52 Grassland Street, Lexington, MA 02421); Nicholas Wrighton (a citizen of the United Kingdom, residing at 18 Lloyd Street, Winchester, MA 01890); Paul S Myers (a citizen of the United States, residing at 171 South Street, Unit 17A, Jamaica Plain, MA 02130); and Gillian Kingsbury (a citizen of the United Kingdom, residing at 23 Fletcher Street, Roslindale, MA 02131), ASSIGNORS, are the inventors of the invention in NOVEL GENES ENCODING PROTEINS HAVING PROGNOSTIC, DIAGNOSTIC, PREVENTIVE THERAPEUTIC, AND OTHER USES for which we have executed an application for a Patent of the United States
□ which is executed on □ even date herewith or □ which is identified by Pennie & Edmonds LLP docket no. 7853-226-999 which was filed on March 1, 2001, Application No. 09/796,858
and WHEREAS, Millennium Pharmaceuticals, Inc., ASSIGNEE is desirous of obtaining our entire right, title and interest in to and under the said invention and the said application:
NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, have sold, assigned transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;
AND WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.
AND WE HEREBY covenant and agree that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

IN TESTIMONY WHEREOF, We hereunto set our hands and seals the day and year set opposite our respective signatures.

Date		, 2	0001 DOUGLA	S A. HOLTZN	MAN		L.S.
State of)) SS.:					
betzon whose n	anne is s	subscribed to the	: within instrumen	it and acknowled	aged to me that he	executed the same	_, Notary Public, vidence to be the in his authorized
the instrument.		y hand and offic		person, or the e	ntity upon behair	of which the perso	n acted, executed

PATENTY2 - 1249825.1

Date	, 2001			L.S.
		JOHN D. SHA	RP	
State of)) SS.:			
County of) 33			
On	, 2001, 1	efore me,		, Notary Public,
personally appeared	JOHN D. SHARP, pe	rsonally known to	me on the basis of sati	sfactory evidence to be the person whose
				d the same in his authorized capacity, and the person acted, executed the instrument.
		•		
WIINESS	my hand and official s	zai .		
Date	, 2001	*********		L.S.
		KEVIN R. LEI	BY	
State of)				
County of) SS.:			
•	2001 1	- 		Natara Dublic
On personally appeared]	, 2001, b	rsonally known to	me on the basis of sati	, Notary Public, sfactory evidence to be the person whose
name is subscribed to	the within instrument	and acknowledged	d to me that he executed	d the same in his authorized capacity, and
that by his signature of	on the instrument the pe	rson, or the entity	upon behalf of which t	he person acted, executed the instrument.
WITNESS 1	ny hand and official se	eal		
Date	, 2001	CONT. DOGG		L.S.
		STEVEN BOSS	SONE	
State of)				
County of) SS.:			
-	2001 1 4	•		N. 4 D. 1.1.
personally appeared	STEVEN BOSSONE	ore me, , personally know	n to me on the basis of	, Notary Public, of satisfactory evidence to be the person
whose name is subsc	ribed to the within in	strument and ackr	nowledged to me that	he executed the same in his authorized thalf of which the person acted, executed
WITNESS n	ny hand and official se	al		

Date	, 2001		L.S.
		YANG PAN	
Date	, 2001	Wasser	
_	***	Witnessed by	
Date	, 2001	Witnessed by	
Date	, 2001	THOMAS M. BARNES	L.S.
State of)			
County of) SS.:)		
personally appeared TH whose name is subscrib capacity, and that by his the instrument.	OMAS M. BARN ed to the within it	before me,	ted the same in his authorized
Date	, 2001	CHRISTOPHER C. FRASER	L.S.
State of)) gg -		
County of) SS.:)		
personally appeared CH person whose name is su	RISTOPHER C. bscribed to the with	before me,	cuted the same in his authorized
WITNESS my	hand and official	seal	

Date 10 30 01	, 2001 NICHOLA	S WRIGHTON	2	L.S.
State of 1435.) County of New Folh.				
On <u>part 30</u> , 20 , 20 personally appeared NICHOLAS We whose name is subscribed to the we capacity, and that by his signature or the instrument.	ithin instrument and	acknowledged to:	me that he executed	the same in his authorized
WITNESS my hand and of				
e serve in the				
Date	. 2001			L.S.
	PAUL S. M	YERS		
State of) County of) SS.:				
On, personally appeared PAUL S. MYE name is subscribed to the within instrument on the instrument.	ument and acknowled	n to me on the basi dged to me that he	s of satisfactory evide executed the same in h	nis authorized capacity, and
WITNESS my hand and of	ficial seal			
Date	, 2001 GILLIAN F	KINGSBURY		L.S.
State of)				
County of) SS.:				
On, for personally appeared GILLIAN KIN whose name is subscribed to the wite capacity, and that by her signature or the instrument.	GSBURY, personally thin instrument and a	y known to me on t cknowledged to m	he basis of satisfactor ne that she executed	the same in her authorized
WITNESS my hand and of	ficial seal			

WHEREAS, WE, Douglas A. Holtzman (a citizen of the United States, residing at 821 Centre Street, #6, Jamaica
Plain, MA 02130); John D. Sharp (a citizen of the United States, residing at 245 Park Avenue, Arlington, MA 02476); Kevin
R. Leiby (a citizen of the United States, residing at 4 Showhegan Way, Natick, MA 01760); Steven Bossone (a citizen of the
United States, residing at 91 Bacon Street, Winchester, MA 01890); Yang Pan (a citizen of the People's Republic of China,
residing 5308 135th Place SE, Bellevue, WA 98006); Thomas M. Barnes (a citizen of Australia, residing at 22 Hanson St. #2,
Boston, MA 02118); Christopher C. Fraser (a citizen of the United States, residing at 52 Grassland Street, Lexington, MA
02421); Nicholas Wrighton (a citizen of the United Kingdom, residing at 18 Lloyd Street, Winchester, MA 01890); Paul S.
Myers (a citizen of the United States, residing at 171 South Street, Unit 17A, Jamaica Plain, MA 02130); and Gillian
Kingsbury (a citizen of the United Kingdom, residing at 23 Fletcher Street, Roslindale, MA 02131), ASSIGNORS, are the
inventors of the invention in NOVEL GENES ENCODING PROTEINS HAVING PROGNOSTIC, DIAGNOSTIC, PREVENTIVE,
THERAPEUTIC, AND OTHER USES for which we have executed an application for a Patent of the United States

	which is executed on even date herewith or
\boxtimes	which is identified by Pennie & Edmonds LLP docket no. 7853-226-999
×	which was filed on March 1, 2001. Application No. 09/796.858

and WHEREAS, Millennium Pharmaceuticals, Inc., ASSIGNEE is desirous of obtaining our entire right, title and interest in, to and under the said invention and the said application:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

AND WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant and agree that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

IN TESTIMONY WHEREOF, We hereunto set our hands and seals the day and year set opposite our respective signatures.

Date	, 2	001 DOUGLAS A.	HOLTZMAN	L.S.
State of)) SS.:			
County of)			
person whose na	me is subscribed to the	within instrument and a	acknowledged to me that.	Notary Public, asis of satisfactory evidence to be the he executed the same in his authorized of which the person acted, executed
WITNE	ESS my hand and offic	cial seal		

PATENT_{NY2} - 1249825.1

Date	, 2001		L.S.
		JOHN D. SHARP	
State of)) SS.:		
County of)		
On	, 2001, b	pefore me,	basis of satisfactory evidence to be the person whose
name is subscribed	ed JOHN D. SHARP, per I to the within instrument	sonally known to me on the land acknowledged to me that	basis of satisfactory evidence to be the person whose the executed the same in his authorized capacity, and
			If of which the person acted, executed the instrument.
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Data	2001		1.0
Date	, 2001	KEVIN R. LEIBY	L.S.
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State of) SS.:		
County of	ý		
On	, 2001, b	efore me,	, Notary Public,
			basis of satisfactory evidence to be the person whose the executed the same in his authorized capacity, and
			f of which the person acted, executed the instrument.
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Date	, 2001		L.S.
		STEVEN BOSSONE	
State of)		
County of) SS.:		
) 2001 haf	*a#aa	Matom, Duklia
personally appeare	ed STEVEN BOSSONE,	personally known to me on	Notary Public, the basis of satisfactory evidence to be the person
whose name is sulcapacity, and that the instrument.	bscribed to the within ins by his signature on the inst	trument and acknowledged trument the person, or the ent	to me that he executed the same in his authorized tity upon behalf of which the person acted, executed
WITNES	S my hand and official se	al	
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Date	, 2001	YANG PAN L.S.
Date	, 2001	Witnessed by
Date	, 2001	
		Witnessed by
Date	, 2001	L.S.
		THOMAS M. BARNES
State of)		
County of) SS.:)	
-	2001 h	efore me,, Notary Public,
the instrument. WITNESS m	y hand and official se	al
Date	, 2001	L.S.
		CHRISTOPHER C. FRASER
State of)		
County of) SS.:	
On personally appeared C person whose name is s	HRISTOPHER C. F	efore me,, Notary Public, RASER, personally known to me on the basis of satisfactory evidence to be the n instrument and acknowledged to me that he executed the same in his authorized
		rument the person, or the entity upon behalf of which the person acted, executed
WITNESS m	y hand and official se	al

Date	, 2001			L.S.
	NICHOL	AS WRIGHTON		
State of)				
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County of)				
oersonally appeared NICHOLAS whose name is subscribed to the apacity, and that by his signature he instrument.	within instrument an	d acknowledged to me t	basis of satisfactory evidence that he executed the same	in his authorized
WITNESS my hand and	official seal			
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	PAUL S.	MYERS		
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State of MASS) County of Nowfolk) SS.:				
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On Drf (70) personally appeared PAUL S. MY name is subscribed to the within inchat by his signature on the instrum	strument and acknow	ledged to me that he exec	uted the same in his authori	zed capacity, and
WITNESS my hand and	official seal			
~ h . A .	_			
Some Mr. Slig				
Date	_, 2001 GILLIAN	KINGSBURY		L.S.
State of)				
County of) SS.:				
On	. 2001. before me.			_, Notary Public,
On	within instrument and	i acknowledged to me th	nat she executed the same	in her authorized
WITNESS my hand and	official seal			

ASSIGNMENT
WHEREAS, WE, Douglas A. Holtzman (a citizen of the United States, residing at 821 Centre Street, #6, Jamaica Plain, MA 02130); John D. Sharp (a citizen of the United States, residing at 245 Park Avenue, Arlington, MA 02476); Kevin R. Leiby (a citizen of the United States, residing at 4 Showhegan Way, Natick, MA 01760); Steven Bossone (a citizen of the United States, residing at 91 Bacon Street, Winchester, MA 01890); Yang Pan (a citizen of the People's Republic of China, residing 5308 135th Place SE, Bellevue, WA 98006); Thomas M. Barnes (a citizen of Australia, residing at 22 Hanson St. #2, Boston, MA 02118); Christopher C. Fraser (a citizen of the United States, residing at 52 Grassland Street, Lexington, MA 02421); Nicholas Wrighton (a citizen of the United Kingdom, residing at 18 Lloyd Street, Winchester, MA 01890); Paul S. Myers (a citizen of the United States, residing at 171 South Street, Unit 17A, Jamaica Plain, MA 02130); and Gillian Kingsbury (a citizen of the United Kingdom, residing at 23 Fletcher Street, Roslindale, MA 02131), ASSIGNORS, are the inventors of the invention in NOVEL GENES ENCODING PROTEINS HAVING PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC, AND OTHER USES for which we have executed an application for a Patent of the United States which is executed on even date herewith or which we have executed an application for a Patent of the United States
which is identified by Pennie & Edmonds LLP docket no. 7853-226-999 which was filed on March 1, 2001, Application No. 09/796,858
and WHEREAS, Millennium Pharmaceuticals, Inc., ASSIGNEE is desirous of obtaining our entire right, title and interest in, to and under the said invention and the said application:
NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;
AND WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.
AND WE HEREBY covenant and agree that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.
AND WE HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.
IN TESTIMONY WHEREOF, We hereunto set our hands and seals the day and year set opposite our respective signatures.
Date, 2001 L.S. DOUGLAS A. HOLTZMAN
State of)
County of SS.:
On, 2001, before me,

PATENT₂ - 1249825.1 REEL: 014571 FRAME: 0659

WITNESS my hand and official seal

Date	, 2001	JOHN D. SHARP	L.S.
		JOHN D. SHARP	
State of)			
ŕ) SS.:		
County of)		
On personally appeared	, 2001,	before me,	, Notary Public, sis of satisfactory evidence to be the person whose
name is subscribed	to the within instrumen	and acknowledged to me that he	executed the same in his authorized capacity, and
			f which the person acted, executed the instrument.
WITNESS	my hand and official s	eal	
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		•	
Data	2001		
Date	, 2001	KEVIN R. LEIBY	L.S.
		•	
State of)) SS.:		
County of) 55		
On	, 2001, 1	pefore me,	, Notary Public,
personally appeared	KEVIN R. LEIBY, po	ersonally known to me on the bas	sis of satisfactory evidence to be the person whose
			executed the same in his authorized capacity, and f which the person acted, executed the instrument.
WIINESS	my hand and official s	eal	
	· · · · · · · · · · · · · · · · · · ·		
Date	, 2001	STEVEN BOSSONE	L.S.
		STEVEN BOSSONE	
State of)			
County of) SS.:		
•	2001 ha	fora ma	Notary Dublic
personally appeared	STEVEN BOSSONE	, personally known to me on the	, Notary Public, e basis of satisfactory evidence to be the person
whose name is subscapacity, and that by the instrument.	cribed to the within in his signature on the ins	strument and acknowledged to trument the person, or the entity	me that he executed the same in his authorized upon behalf of which the person acted, executed
WITNESS	my hand and official se	eal	

PATENTY2 - 1249825.1
REEL: 014571 FRAME: 0660

Date	, 2001	L.S.
		YANG PAN
Date	, 2001	
		Witnessed by
Date	, 2001	Witnessed by
Date	, 2001	THOMAS M. BARNES
State of)	S.:	
County of)		
On	, 2001, b	pefore me,, Notary Public, ES, personally known to me on the basis of satisfactory evidence to be the person
capacity, and that by his signat the instrument. WITNESS my hand a		eal
Date	, 2001	L.S.
	,	CHRISTOPHER C. FRASER
State of)		
County of)	S.:	
•	2001 h	pefore me, , Notary Public,
personally appeared CHRIST person whose name is subscrib	OPHER C. I ed to the with	pefore me,, Notary Public, FRASER, personally known to me on the basis of satisfactory evidence to be the in instrument and acknowledged to me that he executed the same in his authorized strument the person, or the entity upon behalf of which the person acted, executed
WITNESS my hand a	and official se	eal
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3

Date			L.S
		NICHOLAS WRIGHTON	
State of)		
County of) SS.:		
personally whose nar	n, 2001, be appeared NICHOLAS WRIGH to is subscribed to the within in that by his signature on the in	istrument and acknowledged to	, Notary Public, name that he executed the same in his authorized upon behalf of which the person acted, executed
	ITNESS my hand and official s	eal	
	·		
		······································	
Date	, 2001		L.S.
		PAUL S. MYERS	
State of)		
County of) SS.:)		
0	n, 2001,	before me,	, Notary Public,
personany	appeared PAUL S. MYERS, pe	rsonally known to me on the basi	s of satisfactory evidence to be the person whose
name is sui that by his	signature on the instrument the p	and acknowledged to me that he erson, or the entity upon behalf of	executed the same in his authorized capacity, and which the person acted, executed the instrument.
	TITNESS my hand and official s		•
Date (1)	/06/01 ,2001	Catthina	sbury L.S.
	, 2001	GILLIAN KINGSBURY	1.3.
State of	MaxiacRusetts		
County of	maxiackusetts middle flyt		
	11/6, 2001, t	efore me.	C Journey Public,
personally whose nam	appeared GILLIAN KINGSBU e is subscribed to the within ins ad that by her signature on the in-	RY, personally known to me on t trument and acknowledged to n	the basis of satisfactory evidence to be the person that she executed the same in her authorized upon behalf of which the person acted, executed
w	ITNESS my hand and official so	lal (
	(o (•	
	unous per	war	
M	of Commission	expires 9/1/	300 G

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RECORDED: 10/06/2003