PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 Assignment ID: PATI23604

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the assignment document from Howard Hughes Medical Institute to MIT previously recorded on Reel 51413 Frame 277. Assignor(s) hereby confirms the Assignment document with the correct execution date for Howard Hughes Medical Institute.

CONVEYING PARTY DATA

Name	Execution Date
Sangeeta N. Bhatia	10/24/2017
Howard Hughes Medical Institute	07/05/2016
Darrell J. Irvine	10/25/2017
Karl Dane Wittrup	01/30/2018
Andrew David Warren	10/30/2017
Jaideep S. Dudani	10/24/2017
Naveen K. Mehta	06/14/2018

RECEIVING PARTY DATA

Company Name:	Massachusetts Institute of Technology
Street Address:	77 Massachusetts Avenue
City:	Cambridge
State/Country:	MASSACHUSETTS
Postal Code:	02139

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16091145

CORRESPONDENCE DATA

Fax Number: 6176468646

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

using a lax number, it provided, it that is unsuccessful, it will be sent via 05 mai

Phone: 6176468000

Email: mitadministrators@wolfgreenfield.com,fluo@wolfgreenfield.com

Correspondent Name: Flora Luo

Address Line 1: Wolf, Greenfield & Sacks, P.C.

Address Line 2: 600 Atlantic Avenue

Address Line 4: Boston, MASSACHUSETTS 02210

ATTORNEY DOCKET NUMBER:	M0656.70383US01
NAME OF SUBMITTER:	Rachel Moulton

508405717 PATENT REEL: 066818 FRAME: 0910

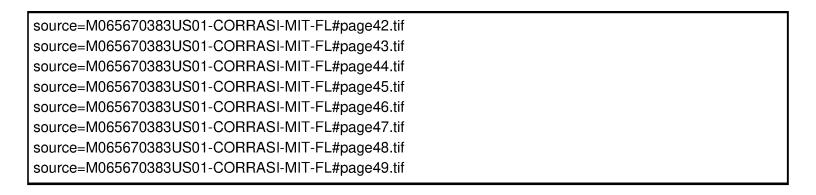
SIGNATURE: Rachel Moulton

DATE SIGNED: 02/26/2024

Total Attachments: 52

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> PATENT REEL: 066818 FRAME: 0911



505835233 12/23/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5882167

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the CONVEYANT PARTY DATA previously recorded on Reel 046542 Frame 0141. Assignor(s) hereby confirms the ASSIGNOR HOWARD HUGHES MEDICAL INSTITUTE ADDED TO CONVEYANCE - SUPPORTING DOCUMENTATION (ASSIGNMENT AGREEMENT) PROVIDED.

CONVEYING PARTY DATA

Name	Execution Date
SANGEETA N. BHATIA	10/24/2017
DARRELL J. IRVINE	10/25/2017
KARL DANE WITTRUP	01/30/2018
ANDREW DAVID WARREN	10/30/2017
JAIDEEP S. DUDANI	10/24/2017
NAVEEN K. MEHTA	06/14/2018
HOWARD HUGHES MEDICAL INSTITUTE	07/05/2016

RECEIVING PARTY DATA

Name:	MASSACHUSETTS INSTITUTE OF TECHNOLOGY
Street Address:	77 MASSACHUSETTS AVENUE
City:	CAMBRIDGE
State/Country:	MASSACHUSETTS
Postal Code:	02139

PROPERTY NUMBERS Total: 1

Property Type	Number
PCT Number:	US1726564

CORRESPONDENCE DATA

Fax Number: (617)646-8646

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 617-646-8000

Email: patents_HelenL@wolfgreenfield.com,

mitadministrators@wolfgreenfield.com

Correspondent Name: WOLF, GREENFIELD & SACKS, P.C.

Address Line 1: 600 ATLANTIC AVE

Address Line 4: BOSTON, MASSACHUSETTS 02210

ATTORNEY DOCKET NUMBER: M0656.70383WO00

PATENT REEL: 066818 FRAME: 0913

505835233

NAME OF SUBMITTER:	HELEN C. LOCKHART
SIGNATURE:	/Helen C. Lockhart/
DATE SIGNED:	12/23/2019

Total Attachments: 46 source=M065670383WO00-CVRSHT-HCL#page1.tif source=M065670383WO00-CVRSHT-HCL#page2.tif source=M065670383WO00-CORRASI-HCL#page1.tif source=M065670383WO00-CORRASI-HCL#page2.tif source=M065670383WO00-CORRASI-HCL#page3.tif source=M065670383WO00-CORRASI-HCL#page4.tif source=M065670383WO00-CORRASI-HCL#page5.tif source=M065670383WO00-CORRASI-HCL#page6.tif source=M065670383WO00-CORRASI-HCL#page7.tif source=M065670383WO00-CORRASI-HCL#page8.tif source=M065670383WO00-CORRASI-HCL#page9.tif source=M065670383WO00-CORRASI-HCL#page10.tif source=M065670383WO00-CORRASI-HCL#page11.tif source=M065670383WO00-CORRASI-HCL#page12.tif source=M065670383WO00-CORRASI-HCL#page13.tif source=M065670383WO00-CORRASI-HCL#page14.tif source=M065670383WO00-CORRASI-HCL#page15.tif source=M065670383WO00-CORRASI-HCL#page16.tif source=M065670383WO00-CORRASI-HCL#page17.tif source=M065670383WO00-CORRASI-HCL#page18.tif source=M065670383WO00-CORRASI-HCL#page19.tif source=M065670383WO00-CORRASI-HCL#page20.tif source=M065670383WO00-CORRASI-HCL#page21.tif source=M065670383WO00-CORRASI-HCL#page22.tif source=M065670383WO00-CORRASI-HCL#page23.tif source=M065670383WO00-CORRASI-HCL#page24.tif source=M065670383WO00-CORRASI-HCL#page25.tif source=M065670383WO00-CORRASI-HCL#page26.tif source=M065670383WO00-CORRASI-HCL#page27.tif source=M065670383WO00-CORRASI-HCL#page28.tif source=M065670383WO00-CORRASI-HCL#page29.tif source=M065670383WO00-CORRASI-HCL#page30.tif source=M065670383WO00-CORRASI-HCL#page31.tif source=M065670383WO00-CORRASI-HCL#page32.tif source=M065670383WO00-CORRASI-HCL#page33.tif source=M065670383WO00-CORRASI-HCL#page34.tif source=M065670383WO00-CORRASI-HCL#page35.tif source=M065670383WO00-CORRASI-HCL#page36.tif source=M065670383WO00-CORRASI-HCL#page37.tif source=M065670383WO00-CORRASI-HCL#page38.tif source=M065670383WO00-CORRASI-HCL#page39.tif source=M065670383WO00-CORRASI-HCL#page40.tif source=M065670383WO00-CORRASI-HCL#page41.tif

> PATENT REEL: 066818 FRAME: 0914

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> PATENT REEL: 066818 FRAME: 0915

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the understaned Assignor, hereby:

- Sell, assign and transfer to Massachusetts Institute of Technology, a 1. Massachusetts Non-profit Corporation having a place of business at 77 Massachusetts Avenue, Cambridge, Massachusetts 02139, its successors, assigns and legal representatives, all hereinafter referred to as the Assignee, my entire right, title and interest for the United States and all foreign countries, in and to any and all inventions and designs which are disclosed in the International Application filed on April 7, 2017 under International Application No. PCT/US2017/026564, bearing Attorney Docket No. M0656.70383WO90, and entitled METHODS TO SPECIFICALLY PROFILE PROTEASE ACTIVITY AT LYMPH NODES, and in and to the application and all corresponding provisional, non-provisional, divisional, continuing, substitute, renewal, reissue and all other applications for Letters Patent, utility models, industrial designs or similar intellectual property rights which have been or shall be filed in the United States, internationally, and in any foreign country, including but not limited to China, Japan and Korea, on any of the inventions and designs; and in and to all original and reissued patents which have been or shall be issued in the United States or any other jurisdiction on the inventions and designs, including the right to apply for patent rights in each foreign country and all rights to priority, including the right to claim priority for China, Japan and Korea; as well as the right to sue in its own name and recover damages for past infringement of any United States Letters Patent and foreign patent, including a reasonable royalty relating to provisional rights under 35 U.S.C. § 154(d) that have attached to any published United States patent application, on the inventions and designs:
- 2. Agree that the Assignee may apply for and receive Letters Patent and utility model and industrial design registrations for the inventions and designs in its own name; and when requested, without charge to but at the expense of the Assignee, agree to carry out in good taith the intent and purpose of this Assignment, by executing all non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent, utility model and industrial design applications on any and all the inventions and designs, by executing all rightful oaths, assignments, powers of attorney and other papers, by communicating to the Assignee all facts known to me relating to the inventions and designs and the history thereof, and generally by doing everything reasonably possible which the Assignee shall consider designs and for vesting title to the inventions and designs and all applications for patents and all patents on the inventions and designs, in the Assignee;
- 3. Request the Director of the United States Patent and Trademark Office and foreign patent authorities to issue the Letters Patent or other intellectual property rights, including foreign patents, to the Assignee;
- 4. Authorize and request Wolf, Greenfield & Sacks, P.C. to supply any missing application identification information or correct any errors in the application identification information provided above, whether discovered prior to or after recordation;

1

Attorney Docket No. M0656.70383WO60

5821256.1

- 5. Covenant with the Assignee that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me; and
- 6. Appoint Assignee, through its designee, my attorney-in-fact to execute, in my name and on my behalf, any and all documents required to effectuate this Assignment, specifically including, but not limited to, those documents specified above and any necessary corrective assignments.

This instrument is executed under seal and signed under the pains and penalties of perjury under the laws of the United States of America.

Attorney Docket No. M0656.70383WO00

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5821256.1

Oct. 24, 2017 Date	Inventor: Sangeeta N/Bhatia Address: 32 Ingleside Road Lexington, MA 02420 UNITED STATES OF AMERICA Citizenship: US Typical Location of the control of
Witness: Oct. 24, 2017 Date	Signature Name: Sue Kangiser Address: 25 Dartmouth St. Arlington, MA 02474
Witness: Oct.24,2017 Date	Name: Lian-Ee Ch'ng Address: 19 Bartlett Street Watertown, MA 02472

5821256.1

3

Data	Incontou	Darrell J. Irvine
Date		
	Address:	17 Gray Street
•		Arlington, Massachusetts 02476
		UNITED STATES OF AMERICA
	Citizenship:	US
Witness:		
Date	Signature	
Date	Olginature	•
	Name:	
	Address:	
Witness:		
Date	Signature	
	Olginature	•
	Name:	
	A alabas a a	
	Address:	
	,	
Attorney Docket No. M0656.70383WO00		

Date	Inventor:	Karl Dane Wittrup
		48 Woodlawn Drive
		Chestnut Hill, Massachusetts 02467
		UNITED STATES OF AMERICA
	Citizenship:	
	•	
Witness:		
Date	Signature	
	Name:	
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Date	Signature	
Date	Signature	
	Name:	
	Address:	· · · · · · · · · · · · · · · · · · ·
Attorney Docket No. M0656.70383WO00		

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5821256.1

Date	laaataa.	Andrew David Warren
Date		
	Address:	22 Water Street
		#523
		Cambridge, Massachusetts 02141
		UNITED STATES OF AMERICA
	Citizenship:	
	•	

Witness:		
Date	Signature	
	5.1	
	Name:	
	Address:	
	7001033.	
Witness:		
Date	Signature	
	J. 3	,
	Name:	
	A .1-1.	
	Address:	
Attorney Docket No. M0656.70383WO00		
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5821256.1

Date	Inventor:	Jaideep S. Dudani
	Address:	120 Peterborough Street
		Apt. 17
		Boston, Massachusetts 02115
		UNITED STATES OF AMERICA
	Citizenship:	US
Witness:		
Date	Signature	
	Name:	
	Address:	
Witness:		
Date	Signature	
	Name:	
	Address:	
Attorney Docket No. M0656.70383WO00		

Date		Naveen K. Mehta
	Address:	139 Otis Street
		Cambridge, Massachusetts 02141
		UNITED STATES OF AMERICA
	Citizenship:	US
Witness:		
Date	Signature	
	Name:	
	Address:	
	Addiess.	
Witness:		

Date		
Dale	Signature	
	Name:	
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	Address:	
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APPOINTMENT OF INVESTIGATOR AS AGENT

Appointment by the Howard Hughes Medical Institute ("HHMI") of Sangeeta Bhatia, MD, PhD, an employee of HHMI, as its agent for the purpose of assigning certain rights to Massachusetts Institute of Technology ("Institution").

WHEREAS, HHMI and Institution collaborate in the active conduct of medical research pursuant to an Agreement between them dated as of March 1, 2015 (the "Agreement");

WHEREAS, pursuant to the Agreement, HHMI has agreed to assign to Institution HHMI's rights in Subject Property (as defined in the Agreement) in accordance with and subject to the conditions of the Agreement;

WHEREAS, research conducted pursuant to the Agreement by Sangeeta Bhatia, MD, PhD while employed by HHMI at Institution has resulted in the invention of a certain Subject Property entitled "Methods to Specifically Profile Protease Activity at Lymph Nodes," which may be the subject of a patent application, (the "Invention"), and the Invention is a Subject Property; and

WHEREAS, HHMI wishes Sangeeta Bhatia, MD, PhD to act as its agent for the purpose of assigning to Institution the rights HHMI has in the Invention by reason of the research program conducted at Institution.

NOW THEREFORE, HHMI hereby appoints Sangeeta Bhatia, MD, PhD as its agent for the purpose of assigning the rights HHMI has or may acquire in the Invention to Institution in accordance with and subject to the conditions of the Agreement.

Executed: July 5, 2016

HOWARD HUGHES MEDICAL INSTITUTE

By:

Erin K. O'Shea, PhD Vice President and Chief Scientific Officer

ATTESTED:

Heidi E. Henning

Aud Henry

Vice President and General Counsel

MIT 18619H HHMI 06269

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned Assignor, hereby:

- Sell, assign and transfer to Massachusetts Institute of Technology, a Massachusetts Non-profit Corporation having a place of business at 77 Massachusetts Avenue, Cambridge, Massachusetts 02139, its successors, assigns and legal representatives, all hereinafter referred to as the Assignee, my entire right, title and interest for the United States and all foreign countries, in and to any and all inventions and designs which are disclosed in the International Application filed on April 7, 2017 under International Application No. PCT/US2017/026564, bearing Attorney Docket No. M0656.70383WO00, and entitled METHODS TO SPECIFICALLY PROFILE PROTEASE ACTIVITY AT LYMPH **NODES**, and in and to the application and all corresponding provisional, non-provisional, divisional, continuing, substitute, renewal, reissue and all other applications for Letters Patent, utility models, industrial designs or similar intellectual property rights which have been or shall be filed in the United States, internationally, and in any foreign country, including but not limited to China, Japan and Korea, on any of the inventions and designs; and in and to all original and reissued patents which have been or shall be issued in the United States or any other jurisdiction on the inventions and designs, including the right to apply for patent rights in each foreign country and all rights to priority, including the right to claim priority for China, Japan and Korea; as well as the right to sue in its own name and recover damages for past infringement of any United States Letters Patent and foreign patent, including a reasonable royalty relating to provisional rights under 35 U.S.C. § 154(d) that have attached to any published United States patent application, on the inventions and designs;
- 2. Agree that the Assignee may apply for and receive Letters Patent and utility model and industrial design registrations for the inventions and designs in its own name; and when requested, without charge to but at the expense of the Assignee, agree to carry out in good faith the intent and purpose of this Assignment, by executing all non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent, utility model and industrial design applications on any and all the inventions and designs, by executing all rightful oaths, assignments, powers of attorney and other papers, by communicating to the Assignee all facts known to me relating to the inventions and designs and the history thereof, and generally by doing everything reasonably possible which the Assignee shall consider desirable for aiding in securing and maintaining proper protection for the inventions and designs and for vesting title to the inventions and designs and all applications for patents and all patents on the inventions and designs, in the Assignee;
- 3. Request the Director of the United States Patent and Trademark Office and foreign patent authorities to issue the Letters Patent or other intellectual property rights, including foreign patents, to the Assignee;
- 4. Authorize and request Wolf, Greenfield & Sacks, P.C. to supply any missing application identification information or correct any errors in the application identification information provided above, whether discovered prior to or after recordation:

Attorney Docket No. M0656.70383WO00

1

- 5. Covenant with the Assignee that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me; and
- 6. Appoint Assignee, through its designee, my attorney-in-fact to execute, in my name and on my behalf, any and all documents required to effectuate this Assignment, specifically including, but not limited to, those documents specified above and any necessary corrective assignments.

This instrument is executed under seal and signed under the pains and penalties of perjury under the laws of the United States of America.

Date	Inventor:	Sangeeta N. Bhatia
	Address:	32 Ingleside Road
		Lexington, MA 02420
		UNITED STATES OF AMERICA
	Citizenship:	US
Witness:		
Date	Signature)
	Name:	
	Address:	
	710010001	
Witness:		
Date	Signature	
	Name:	
	Address:	

10/25/17		Hand An
Date /	Inventor:	Darrell J. Irvine
	Address:	17 Gray Street
		Arlington, Massachusetts 02476
		UNITED STATES OF AMERICA
	Citizenship:	US
Witness:		
10/25/17	\mathcal{A}	alein Corax
Date	Signature	acris Series
	Name:	Valene Corapi 264 Beal Rd. Waithan, MA 02453
	Address:	264 Beal Rd.
		Waltham, MA 02453
Witness:		
10/25/2019		man De Mar
Date	Signature	
	Name:	Mark S. Miller
	Address:	16 Colby Steed

Date	Inventor:	Karl Dane Wittrup
	Address:	48 Woodlawn Drive
		Chestnut Hill, Massachusetts 02467
		UNITED STATES OF AMERICA
	Citizenship:	US
Witness:		
Date	Signature	
	o ig i ia ta i	
	Name:	
	Address:	
Witness:		
Date	Signature	,
	J	
	Name:	
	Address:	
	Addi 033.	

Date	Inventor:	Andrew David Warren
	Address:	22 Water Street
		#523
		Cambridge, Massachusetts 02141
		UNITED STATES OF AMERICA
	Citizenship:	US
Witness:		
Date	Signature)
	N.I.	
	Name:	
	Address:	
Witness:		
Date	Signature	3
	• •	
	Name:	
	Address:	

Date		Jaideep S. Dudani
	Address:	120 Peterborough Street
		Apt. 17
		Boston, Massachusetts 02115
		UNITED STATES OF AMERICA
	Citizenship:	US
Witness:		
Date	Signature	9
	Name:	
	Address:	
Martha		
Witness:		
Date	Signature	
	Name:	
	Address:	

Date	Inventor:	Naveen K. Mehta
	Address:	139 Otis Street
		Cambridge, Massachusetts 02141
		UNITED STATES OF AMERICA
	Citizenship:	US
Witness:		
Date	Signature)
	Name:	
	Address:	
	, ladi odo.	
Witness:		
Date	Signature	3
	Name:	
	Name.	
	Address:	

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned Assignor, hereby:

- Sell, assign and transfer to Massachusetts Institute of Technology, a Massachusetts Non-profit Corporation having a place of business at 77 Massachusetts Avenue, Cambridge, Massachusetts 02139, its successors, assigns and legal representatives, all hereinafter referred to as the Assignee, my entire right, title and interest for the United States and all foreign countries, in and to any and all inventions and designs which are disclosed in the International Application filed on April 7, 2017 under International Application No. PCT/US2017/026564, bearing Attorney Docket No. M0656.70383WO00, and entitled METHODS TO SPECIFICALLY PROFILE PROTEASE ACTIVITY AT LYMPH **NODES**, and in and to the application and all corresponding provisional, non-provisional, divisional, continuing, substitute, renewal, reissue and all other applications for Letters Patent, utility models, industrial designs or similar intellectual property rights which have been or shall be filed in the United States, internationally, and in any foreign country, including but not limited to China, Japan and Korea, on any of the inventions and designs; and in and to all original and reissued patents which have been or shall be issued in the United States or any other jurisdiction on the inventions and designs, including the right to apply for patent rights in each foreign country and all rights to priority, including the right to claim priority for China, Japan and Korea; as well as the right to sue in its own name and recover damages for past infringement of any United States Letters Patent and foreign patent, including a reasonable royalty relating to provisional rights under 35 U.S.C. § 154(d) that have attached to any published United States patent application, on the inventions and designs;
- 2. Agree that the Assignee may apply for and receive Letters Patent and utility model and industrial design registrations for the inventions and designs in its own name; and when requested, without charge to but at the expense of the Assignee, agree to carry out in good faith the intent and purpose of this Assignment, by executing all non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent, utility model and industrial design applications on any and all the inventions and designs, by executing all rightful oaths, assignments, powers of attorney and other papers, by communicating to the Assignee all facts known to me relating to the inventions and designs and the history thereof, and generally by doing everything reasonably possible which the Assignee shall consider desirable for aiding in securing and maintaining proper protection for the inventions and designs and for vesting title to the inventions and designs and all applications for patents and all patents on the inventions and designs, in the Assignee;
- 3. Request the Director of the United States Patent and Trademark Office and foreign patent authorities to issue the Letters Patent or other intellectual property rights, including foreign patents, to the Assignee;
- 4. Authorize and request Wolf, Greenfield & Sacks, P.C. to supply any missing application identification information or correct any errors in the application identification information provided above, whether discovered prior to or after recordation:

Attorney Docket No. M0656.70383WO00

1

- 5. Covenant with the Assignee that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me; and
- 6. Appoint Assignee, through its designee, my attorney-in-fact to execute, in my name and on my behalf, any and all documents required to effectuate this Assignment, specifically including, but not limited to, those documents specified above and any necessary corrective assignments.

This instrument is executed under seal and signed under the pains and penalties of perjury under the laws of the United States of America.

Date	Inventor:	Sangeeta N. Bhatia
	Address:	32 Ingleside Road
		Lexington, MA 02420
		UNITED STATES OF AMERICA
	Citizenship:	US
Witness:		
Date	Signature)
	Name:	
	Address:	
	710010001	
Witness:		
Date	Signature	
	Name:	
	Address:	

Date	Inventor:	Darrell J. Irvine
	Address:	17 Gray Street
		Arlington, Massachusetts 02476
		UNITED STATES OF AMERICA
	Citizenship:	US
Witness:		
Date	Signature	· ·
	Name:	
	Address:	
Witness:		
Date	Signature	
	Name:	
	Address:	

1/30/18	Month
Date/	Inventor: Karl Dane Wittrup
	Address: 48 Woodlawn Drive
	Chestnut Hill, Massachusetts 02467
	UNITED STATES OF AMERICA
	Citizenship: US
Witness: 30 8 Date	Signature Name: Mariaun Muway Address: 5A Pine 87 Westfeal, MA 01886
Witness:	$(X/_{0})$
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Date	Signature /

Name:

Address:

Valene Corap; 264 Beal Rd. Waltham, 4A 02453

Date	Inventor:	Andrew David Warren
	Address:	22 Water Street
		#523
		Cambridge, Massachusetts 02141
		UNITED STATES OF AMERICA
	Citizenship:	US
Witness:		
Date	Signature)
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	Name:	
	Address:	
	Address.	
Witness:		
Date	Signature)
	Name	
	Name:	
	Address:	

Date		Jaideep S. Dudani
	Address:	120 Peterborough Street
		Apt. 17
		Boston, Massachusetts 02115
		UNITED STATES OF AMERICA
	Citizenship:	US
Witness:		
Date	Signature)
	Name:	
	Address:	
	Address.	
Witness:		
Date	Signature	9
	Name:	
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	Address:	

Date	Inventor:	Naveen K. Mehta
	Address:	139 Otis Street
		Cambridge, Massachusetts 02141
		UNITED STATES OF AMERICA
	Citizenship:	US
Witness:		
Date	Signature	
	Name:	
	Address:	
Witness:		
Date	Signature	9
	Name:	
	Address:	

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned Assignor, hereby:

- Sell, assign and transfer to Massachusetts Institute of Technology, a Massachusetts Non-profit Corporation having a place of business at 77 Massachusetts Avenue, Cambridge, Massachusetts 02139, its successors, assigns and legal representatives, all hereinafter referred to as the Assignee, my entire right, title and interest for the United States and all foreign countries, in and to any and all inventions and designs which are disclosed in the International Application filed on April 7, 2017 under International Application No. PCT/US2017/026564, bearing Attorney Docket No. M0656.70383WO00, and entitled METHODS TO SPECIFICALLY PROFILE PROTEASE ACTIVITY AT LYMPH NODES, and in and to the application and all corresponding provisional, non-provisional, divisional, continuing, substitute, renewal, reissue and all other applications for Letters Patent, utility models, industrial designs or similar intellectual property rights which have been or shall be filed in the United States, internationally, and in any foreign country, including but not limited to China, Japan and Korea, on any of the inventions and designs; and in and to all original and reissued patents which have been or shall be issued in the United States or any other jurisdiction on the inventions and designs, including the right to apply for patent rights in each foreign country and all rights to priority, including the right to claim priority for China, Japan and Korea; as well as the right to sue in its own name and recover damages for past infringement of any United States Letters Patent and foreign patent, including a reasonable royalty relating to provisional rights under 35 U.S.C. § 154(d) that have attached to any published United States patent application, on the inventions and designs:
- 2. Agree that the Assignee may apply for and receive Letters Patent and utility model and industrial design registrations for the inventions and designs in its own name; and when requested, without charge to but at the expense of the Assignee, agree to carry out in good faith the intent and purpose of this Assignment, by executing all non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent, utility model and industrial design applications on any and all the inventions and designs, by executing all rightful oaths, assignments, powers of attorney and other papers, by communicating to the Assignee all facts known to me relating to the inventions and designs and the history thereof, and generally by doing everything reasonably possible which the Assignee shall consider desirable for aiding in securing and maintaining proper protection for the inventions and designs and for vesting title to the inventions and designs and all applications for patents and all patents on the inventions and designs, in the Assignee;
- 3. Request the Director of the United States Patent and Trademark Office and foreign patent authorities to issue the Letters Patent or other intellectual property rights, including foreign patents, to the Assignee;
- 4. Authorize and request Wolf, Greenfield & Sacks, P.C. to supply any missing application identification information or correct any errors in the application identification information provided above, whether discovered prior to or after recordation;

Attorney Docket No. M0656.70383WO00

1

- 5. Covenant with the Assignee that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me; and
- 6. Appoint Assignee, through its designee, my attorney-in-fact to execute, in my name and on my behalf, any and all documents required to effectuate this Assignment, specifically including, but not limited to, those documents specified above and any necessary corrective assignments.

This instrument is executed under seal and signed under the pains and penalties of perjury under the laws of the United States of America.

Date	Inventor:	Sangeeta N. Bhatia
	Address:	32 Ingleside Road
		Lexington, MA 02420
		UNITED STATES OF AMERICA
	Citizenship:	US
Witness:		
Date	Signature	
	Name:	
	Address:	
Witness:		
Date	Signature	9
	Name:	
	Address:	

Date	Inventor:	Darrell J. Irvine
	Address:	17 Gray Street
		Arlington, Massachusetts 02476
		UNITED STATES OF AMERICA
	Citizenship:	US
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Witness:		
Date	Signature	9
	Name:	
	Address:	
Witness:		
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	Mana	
	Name:	
	Address:	

Date	Inventor:	Karl Dane Wittrup
	Address:	48 Woodlawn Drive
		Chestnut Hill, Massachusetts 02467
		UNITED STATES OF AMERICA
	Citizenship:	US
Witness:		
Date	Signature	
	Name:	
	Address:	
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Date	Signature	
	Name:	
	Address:	

30 Oct 217	ach Win
Date	Inventor: Andrew David Warren
	Address: 22 Water Street
	#523
	Cambridge, Massachusetts 02141
	UNITED STATES OF AMERICA
	Citizenship: US
Witness:	£ 16
30 OCT 2017	
Date	Signature
	Name: ERIC HUANF
	Name: ERIC HUANF Address: 10 SHUMMAN ST LEXINGTON, MA UZ420
	LEXINGTON, MA 02420
Witness:	2
20 OCT 2017 Date	Signature Childle
	Name: SOPUE CAZANAJE
	Address: 3 Newberry Stroet
	SOMERVILLE MA 02144

Date	Inventor:	Jaideep S. Dudani
	Address:	120 Peterborough Street
		Apt. 17
		Boston, Massachusetts 02115
		UNITED STATES OF AMERICA
	Citizenship:	US
Witness:		
Date	Signature	
	Name:	
	Name.	
	Address:	
Witness:		
Date	Signature	→
	Name:	
	Address:	

Date	Inventor:	Naveen K. Mehta
	Address:	139 Otis Street
		Cambridge, Massachusetts 02141
		UNITED STATES OF AMERICA
	Citizenship:	US
Witness:		
Date	Signature	
	Name:	
	Address:	
Witness:		
Date	Signature	
	Name:	
	Address:	

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned Assignor, hereby:

- Sell, assign and transfer to Massachusetts Institute of Technology, a Massachusetts Non-profit Corporation having a place of business at 77 Massachusetts Avenue, Cambridge, Massachusetts 02139, its successors, assigns and legal representatives, all hereinafter referred to as the Assignee, my entire right, title and interest for the United States and all foreign countries, in and to any and all inventions and designs which are disclosed in the International Application filed on April 7, 2017 under International Application No. PCT/US2017/026564, bearing Attorney Docket No. M0656.70383WO00, and entitled METHODS TO SPECIFICALLY PROFILE PROTEASE ACTIVITY AT LYMPH NODES, and in and to the application and all corresponding provisional, non-provisional, divisional, continuing, substitute, renewal, reissue and all other applications for Letters Patent, utility models, industrial designs or similar intellectual property rights which have been or shall be filed in the United States, internationally, and in any foreign country, including but not limited to China, Japan and Korea, on any of the inventions and designs; and in and to all original and reissued patents which have been or shall be issued in the United States or any other jurisdiction on the inventions and designs, including the right to apply for patent rights in each foreign country and all rights to priority, including the right to claim priority for China, Japan and Korea; as well as the right to sue in its own name and recover damages for past infringement of any United States Letters Patent and foreign patent, including a reasonable royalty relating to provisional rights under 35 U.S.C. § 154(d) that have attached to any published United States patent application, on the inventions and designs;
- 2. Agree that the Assignee may apply for and receive Letters Patent and utility model and industrial design registrations for the inventions and designs in its own name; and when requested, without charge to but at the expense of the Assignee, agree to carry out in good faith the intent and purpose of this Assignment, by executing all non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent, utility model and industrial design applications on any and all the inventions and designs, by executing all rightful oaths, assignments, powers of attorney and other papers, by communicating to the Assignee all facts known to me relating to the inventions and designs and the history thereof, and generally by doing everything reasonably possible which the Assignee shall consider desirable for aiding in securing and maintaining proper protection for the inventions and designs and for vesting title to the inventions and designs and all applications for patents and all patents on the inventions and designs, in the Assignee;
- 3. Request the Director of the United States Patent and Trademark Office and foreign patent authorities to issue the Letters Patent or other intellectual property rights, including foreign patents, to the Assignee;
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Attorney Docket No. M0656.70383WO00

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- 6. Appoint Assignee, through its designee, my attorney-in-fact to execute, in my name and on my behalf, any and all documents required to effectuate this Assignment, specifically including, but not limited to, those documents specified above and any necessary corrective assignments.

This instrument is executed under seal and signed under the pains and penalties of perjury under the laws of the United States of America.

Date	Inventor:	Sangeeta N. Bhatia
	Address:	32 Ingleside Road
		Lexington, MA 02420
		UNITED STATES OF AMERICA
	Citizenship:	US
Witness:		
Date	Signature	9
	Name:	
	Address:	
Witness:		
Date	Signature	9
	Name:	***************************************
	Address:	

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Date	Inventor:	Darrell J. Irvine
	Address:	17 Gray Street
		Arlington, Massachusetts 02476
		UNITED STATES OF AMERICA
	Citizenship:	US
Witness:		
Date	Signature	
	Name:	
	Address:	
Witness:		
44 III 1655.		
Date	Signature)
	Name:	
	Address:	

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Date	Inventor:	Karl Dane Wittrup
		48 Woodlawn Drive
		Chestnut Hill, Massachusetts 02467
		UNITED STATES OF AMERICA
	Citizenship:	US
Witness:		
Date	Signature	
	Name:	
	Address:	
,		
Witness:		
Date	Signature	
	Name:	
	Address:	

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Date		Andrew David Warren
	Address:	22 Water Street
		#523
		Cambridge, Massachusetts 02141
		UNITED STATES OF AMERICA
	Citizenship:	US
Witness:		
Date	Signature	
	Name:	
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Attorney Docket No. M0656.70383WO00		

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Inventor: Jaideep-8: Dudani Address: 120 Peterborough Street Apt. 17 Boston, Massachusetts 02115 UNITED STATES OF AMERICA Citizenship: US Witness: ID]24 2017 Date Name: NIL GURAL Address: \$81 MASSACHUSETTS AVE CAMBIZIDGE, MA D2139 Witness: Henry ID/24/17 Date Name: Henry Ko Address: 100 Exchange Stat Unit 517 Malden, MA 02148	10/24/17		15 Prodani
Apt. 17 Boston, Massachusetts 02115 UNITED STATES OF AMERICA Citizenship: US Witness: 10/24/17 Date Name: NIL CAURAL Address: \$81 MASSACHUSCTTS AVE CAMBRIDGE, MA D2139 Witness: Henry Ko Address: 100 Exchange Steet Unit 51	Date	Inventor:	Jaideep 8. Dudani
Boston, Massachusetts 02115 UNITED STATES OF AMERICA Citizenship: US Witness: ID124 12017 Date Name: NIL CAURAL Address: \$81 MASSIA(MUSETTS AVE CAMBILIDGE, MA D2139 Witness: Henry Ko Address: IOD Exchange Steet Unit 51		Address:	120 Peterborough Street
Witness: 10 24 12017 Signature Name: NIL GUERL Address: S81 MASSIA(MUSCTTS AVE CAMBILIDGE, MA D2139 Date D/24/17 Date Name: Henry Ko Address: 100 Exchange Steet Unit 51			Apt. 17
Witness: 10/24/7017 Date Name: Name: NIL GUEAL Address: \$81 MASSIA(MUSETTS AVE CAMBRIDGE, MA D2139 Witness: Heary Date Name: Heary Ko Address: 100 Exchange Start Unit 51			Boston, Massachusetts 02115
Witness: 10/24/2017 Date Name: NIL GURAL Address: \$81 MASSALMUSETTS AVE CAMBINGE, MA D2139 Witness: Heary 10/24/17 Date Name: Heary Ko Address: 100 Exchange Start Unit 51			UNITED STATES OF AMERICA
Name: Name: Name: NIL GUERL Address: \$81 MASSIA(MUSETTS AVE CAMBIZIDGE, MA D2139 Witness: Henry Name: Name		Citizenship:	US
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Witness: Henry 10/24/17 Date Signature Name: Henry Ko Address: 100 Exchange Street Unit 51		Address:	881 MASSALHUSETTS AVE
Witness: Henry 10/24/17 Date Signature Name: Henry Ko Address: 100 Exchange Street Unit 51			CAMBILIDGE, MA 02139
Date Signature Name: Henry Ko Address: 100 Exchange Street Unit 51			•
Date Signature Name: Henry Ko Address: 100 Exchange Street Unit 51	11		2
Name: Henry Ko Address: 100 Exchange Street Unit 51	Witness: HEAN		AA
Name: Henry Ko Address: 100 Exchange Street Unit 51	10/24/12		
Address: 100 Exchange Street Unit 51	Date	Signature	
		Name:	Henry Ko
		Address:	
			Malden, MA 02148

Date	Inventor:	Naveen K. Mehta
	Address:	139 Otis Street
		Cambridge, Massachusetts 02141
		UNITED STATES OF AMERICA
	Citizenship:	US
Witness:		
Date	Signature	3
	Name:	
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Date	Inventor:	Sangeeta N. Bhatia
	Address:	32 Ingleside Road
		Lexington, MA 02420
		UNITED STATES OF AMERICA
	Citizenship:	US
Witness:		
Date	Signature)
	Name:	
	Address:	
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Witness:		
Date	Signature	
	Name:	
	Address:	

Date	Inventor:	Darrell J. Irvine
	Address:	17 Gray Street
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	Address:	

Date	Inventor:	Karl Dane Wittrup
	Address:	48 Woodlawn Drive
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Date	Inventor:	Andrew David Warren
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6/14/18		Man Met
Date	Inventor:	Naveen K. Mehta
	Address:	139 Otis Street
		Cambridge, Massachusetts 02141
		UNITED STATES OF AMERICA
C	itizenship:	US
Witness:		
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Date '	Signature	
	Name:	Alison Tisdale
	Address:	207 White St.
		Belmont, MA 02478
Witness: 6114118		Rouped
Date	Signature	
	Name:	NOOL WOMIN
	Address:	89 Winter St. #2
		compridge, MA 02141

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RECORDED: 02/26/2024