

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5702084

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
Mehmet Toner	08/13/2019
Shannon N. Tessier	08/16/2019
Lindong Weng	08/13/2019
Shannon L. Stott	08/12/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	THE GENERAL HOSPITAL CORPORATION
<b>Street Address:</b>	55 FRUIT STREET
<b>City:</b>	BOSTON
<b>State/Country:</b>	MASSACHUSETTS
<b>Postal Code:</b>	02114
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16313714
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(877)769-7945
<i>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.</i>	
<b>Phone:</b>	+1 (617) 368-2109
<b>Email:</b>	apsi@fr.com
<b>Correspondent Name:</b>	DOYON WON
<b>Address Line 1:</b>	FISH & RICHARDSON P.C.
<b>Address Line 2:</b>	P.O.BOX 1022
<b>Address Line 4:</b>	MINNEAPOLIS, MINNESOTA 55440-1022
<b>ATTORNEY DOCKET NUMBER:</b>	29539-0242US1
<b>NAME OF SUBMITTER:</b>	CHRISTINE M. GRACE
<b>SIGNATURE:</b>	/Christine M. Grace/
<b>DATE SIGNED:</b>	09/05/2019
<b>Total Attachments: 6</b>	
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**PATENT**

**REEL: 050273 FRAME: 0924**

## ASSIGNMENT

For valuable consideration, the receipt of which we acknowledge, and intending to be bound legally, we, MEHMET TONER, SHANNON N. TESSIER, LINDONG WENG, and SHANNON L. STOTT, each individually assign to THE GENERAL HOSPITAL CORPORATION, a corporation formed under the laws of Massachusetts and having a principal place of business at 55 Fruit Street, Boston, MA 02114, and its successors, transferees, and assignees (collectively the "Assignee"), all of our individual and joint right, title, and interest throughout the world in the invention(s) (the "Subject Matter") described in a patent application that names us as inventors, is titled "ICE NUCLEATION FORMULATIONS FOR CRYOPRESERVATION AND STABILIZATION OF BIOLOGICS," and was filed in the United States Patent and Trademark Office on December 27, 2018, as application 16/313,714 (the "Application").

This Assignment assigns, in addition to the Subject Matter of the Application, (a) the Application and all other applications that may be made for, and all patents, utility models, design registrations, and other rights of exclusion and inventors' certificates for, any of the Subject Matter (collectively the "Applications and Granted Rights") in every country or region and under every treaty or convention, (b) the right to claim priority based on and the benefit of the filing date of any of the Applications and Granted Rights under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other applicable treaties or conventions, and (c) the right to pursue, collect, and retain in the Assignee's name or otherwise, damages and any other remedies arising from any past, present, or future infringement of the Subject Matter, the Applications and Granted Rights, and any other rights assigned by this Assignment.

We authorize the Assignee to apply for and pursue protection for any or all of the Subject Matter, the Applications and Granted Rights, and any other rights assigned by this Assignment in all countries, regions, and territories of the world, in our names or in the Assignee's name.

We represent and warrant that we have the right and power to make this Assignment and that we have not made and will not make any other assignment that conflicts with this Assignment.

We will communicate to the Assignee (or, at the request of the Assignee to other parties) all known facts in any form relating to the Subject Matter; will execute and provide all oaths and declarations, statements, testimony, assignments, powers of attorney, applications, and documents; and will perform all other lawful acts necessary or desirable to secure fully to the Assignee the rights, titles, and interests assigned by this Assignment.

Mehmet Toner  
Mehmet Toner

DATE: 08/13/2019

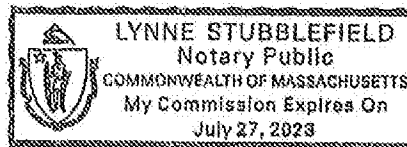
The Commonwealth of Massachusetts

Suffolk ss.



On this 13<sup>th</sup> day of August, 2019, before me, the undersigned notary public, personally appeared Mehmet Toner, proved to me through satisfactory evidence of identification, which were MGH # 11, to be the person(s) whose name(s) is/are signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose.

[Signature]  
Notary Public



Shannon N. Tessier  
Shannon N. Tessier

DATE: Aug 16/19

The Commonwealth of Massachusetts

Suffolk

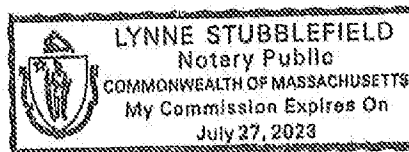
SS.



On this 16<sup>th</sup> day of August, 2019, before me, the undersigned notary public, personally appeared Shannon Tessier, proved to me through satisfactory evidence of identification, which were MGH ID, to be the person(s) whose name(s) is/are signed on the preceding or attached document, and acknowledged to me that she signed it voluntarily for its stated purpose.

[Signature]

Notary Public



Lindong Weng  
Lindong Weng

DATE: 8/13/2019

The Commonwealth of Massachusetts

Middlesex ss.



On this 13<sup>th</sup> day of August, 2019 before me, the undersigned notary public, personally appeared Lindong Weng, proved to me through satisfactory evidence of identification, which were DL MASS, to be the person(s) whose name(s) is/are signed on the preceding or attached document, and acknowledged to me that He signed it voluntarily for its stated purpose.

Veneda Hiori  
Notary Public



VENEDA HIORI  
Notary Public  
Commonwealth of Massachusetts  
My Commission Expires Sept. 26, 2025

Shannon L. Stott

Shannon L. Stott

DATE: 8/12/2019

The Commonwealth of Massachusetts

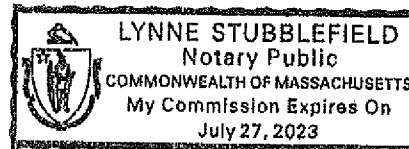
Suffolk

ss.



On this 12 day of August, 2019, before me, the undersigned notary public, personally appeared Shannon Stott, proved to me through satisfactory evidence of identification, which were MGHID, to be the person(s) whose name(s) is/are signed on the preceding or attached document, and acknowledged to me that she signed it voluntarily for its stated purpose.

[Signature]  
Notary Public



The Assignee hereby acknowledges and accepts the foregoing assignment.

Assignee: THE GENERAL HOSPITAL CORPORATION

Signature: Bruce W. Tedeschi Date: 8/28/19

Name: BRUCE Tedeschi Bruce W. Tedeschi, PhD, JD

Title: DIRECTOR of IP Director, Innovation  
The General Hospital Corporation

The Commonwealth of Massachusetts

Middlesex ss.



On this 28 day of August, 2019, before me, the undersigned notary public, personally appeared Bruce Tedeschi, proved to me through satisfactory evidence of identification, which were RI Driver's License, to be the person(s) whose name(s) is/are signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose.

Rebecca A. Hubbard  
Notary Public

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REBECCA A. HUBBARD  
Notary Public  
Commonwealth of Massachusetts  
My Commission Expires  
May 30, 2025