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U.S. Department of Commerce Patent and Trademark Office

UMBI-0001-1

To the Honorable Commissioner of Patents and Trademarks. Please record the attached original nocuments or copy thereof. Name of Conveying Party(ies): Name and Address of Receiving Party(ies): BENTLEY, William E.; GILL, Ryan T ☐ Additional names of conveying parties attached Name: The University of Maryland **Biotechnology Institute** Internal Address: Street Address: 4321 Hartwick Road, Suite 500 Nature of Conveyance: \times Assignment Change of Name Other: **Execution Date:** City, State, Zip: College Park, Maryland 20740 ☐ Additional name(s) and address(es) attached. (a) Patent Application Number(s): 4. (b) Patent Numbers: March 25, 2000 If this document is being filed together with a new application, the execution date of the application is: ☐ Additional Numbers Attached. Name and Address of Party to whom Correspondence Concerning Total Number of Applications and Patents Involved: 1 this Document Should be Mailed: Name: Ajay A. Jagtiani Total Fee: \$40.00 (37 C.F.R. § 3.41) Address: **JAGTIANI & ASSOCIATES** 10379-B Democracy Lane Enclosed. Fairfax, Virginia 22030 \times Authorized to be charged to deposit account. 8. Deposit Account Number: 10-0233 ATTACH DUPLICATE COPY OF THIS PAGE IF PAYING BY DEPOSIT ACCOUNT DO NOT USE THIS SPACE 9. Statement and Signature:

knowledge and belief, the foregoing is true and correct and any attached copy is a true copy of the original

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Lagtiani, Registration Number 35,205

REEL: 010862 FRAME: 0075

PATENT

March 24, 2000

Total number of pages comprising cover sheet: 1

ASSIGNMENT

WHEREAS, WILLIAM E. BENTLEY, whose post office addresses appear below (hereinafter referred to as ASSIGNOR), have invented certain new and useful improvements in a METHOD OF DIFFERENTIAL DISPLAY OF PROKARYOTIC MESSENGER RNA BY RTPCR (hereinafter referred to as THE INVENTION) for which an application for United States Letters Patent is filed concurrently herewith;

WHEREAS, THE UNIVERSITY OF MARYLAND BIOTECHNOLOGY INSTITUTE, whose post office address is 701 E. Pratt Street, Suite 200, Columbus Center, Baltimore, Maryland 21202. (hereinafter referred to as ASSIGNEE), is desirous of acquiring the entire right, title and interest in and to the same in the United States and throughout the world;

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, we, ASSIGNOR, by these presents do sell, assign and transfer until said ASSIGNEE, the entire right, title and interest in and to said invention and application throughout the United States of America, including any and all United States Letters Patent granted on any division, continuation, continuation-in-part and reissue of said application; and the entire right, title and interest in and to said invention throughout the world, including the right to apply for patents and inventor certificates in respect thereof and to claim priority pursuant to rights accorded ASSIGNOR under the terms of the Paris International Convention and all other available international conventions and treaties; and the entire right, title and interest in and to any and all patents, patents of addition, utility models, patents of importation, revalidation patents and inventor certificates which may be granted throughout the world in respect of said invention.

ALSO, Assignor hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of said application or any other patent application(s) or inventor certificate(s) in the United States and in foreign countries for said invention, including additional documents that may be required to affirm the rights of Assignee in and to said invention, all without further consideration. Assignor also agrees, without further consideration and at Assignee's expense, to identify and communicate to Assignee at Assignee's request documents and information concerning the invention that are within Assignor's possession or control, and to provide further assurances and testimony on behalf of Assignee that lawfully may be required of Assignor in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. Assignor's obligations under this instrument shall extend to Assignor's heirs, executors, administrators and other legal representatives.

Assignor hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent referred to above to Assignee of the entire right, title and interest in and to the same, for Assignee's sole use and behalf; and for the use and behalf of Assignee's legal representatives and successors, to the full end of the term for which such Letters Patent may be granted, as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made.

Villiam E. Bentley 109 White Marlin Way Annapolis, Maryland 21401	Signature	
	Date:	5/17/00
	ssn.	(Notarization preferred but not required)
Before me personally appeared said and deed this day of	, 2000.	and acknowledges this instrument to be his (her) free act

Notary Public

PATENT REEL: 010862 FRAME: 0076

ASSIGNMENT

WHEREAS, RYAN T. GILL, whose post office addresses appear below (hereinafter referred to as ASSIGNOR), have invented certain new and useful improvements in a METHOD OF DIFFERENTIAL DISPLAY OF PROKARYOTIC MESSENGER RNA BY RTPCR (hereinafter referred to as THE INVENTION) for which an application for United States Letters Patent is filed concurrently herewith;

WHEREAS, THE UNIVERSITY OF MARYLAND BIOTECHNOLOGY INSTITUTE, whose post office address is 701 E. Pratt Street, Suite 200, Columbus Center, Baltimore, Maryland 21202, (hereinafter referred to as ASSIGNEE), is desirous of acquiring the entire right, title and interest in and to the same in the United States and throughout the world;

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, we, ASSIGNOR, by these presents do sell, assign and transfer until said ASSIGNEE, the entire right, title and interest in and to said invention and application throughout the United States of America, including any and all United States Letters Patent granted on any division, continuation, continuation-in-part and reissue of said application; and the entire right, title and interest in and to said invention throughout the world, including the right to apply for patents and inventor certificates in respect thereof and to claim priority pursuant to rights accorded ASSIGNOR under the terms of the Paris International Convention and all other available international conventions and treaties; and the entire right, title and interest in and to any and all patents, patents of addition, utility models, patents of importation, revalidation patents and inventor certificates which may be granted throughout the world in respect of said invention.

ALSO, Assignor hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of said application or any other patent application(s) or inventor certificate(s) in the United States and in foreign countries for said invention, including additional documents that may be required to affirm the rights of Assignee in and to said invention, all without further consideration. Assignor also agrees, without further consideration and at Assignee's expense, to identify and communicate to Assignee at Assignee's request documents and information concerning the invention that are within Assignor's possession or control, and to provide further assurances and testimony on behalf of Assignee that lawfully may be required of Assignor in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. Assignor's obligations under this instrument shall extend to Assignor's heirs, executors, administrators and other legal representatives.

ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent referred to above to ASSIGNEE of the entire right, title and interest in and to the same, for ASSIGNEE's sole use and behalf; and for the use and behalf of ASSIGNEE's legal representatives and successors, to the full end of the term for which such Letters Patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale not becamade.

Date:

2000.

ssn.

Ryan T. Gill 84 Gainsborough Street, No. 301 Boston, MA 02115

Before me personally appeared said

and deed this _____ day of _____

and acknowledges this instrument to be his (her) free act

(Notarization preferred but not required)

Notary Public

PATENT
RECORDED: 06/16/2000 REEL: 010862 FRAME: 0077