

# PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT												
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT												
<b>CONVEYING PARTY DATA</b>													
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Name</th> <th style="width: 30%;">Execution Date</th> </tr> </thead> <tbody> <tr> <td>Helen Rachel Crooke</td> <td>10/07/2003</td> </tr> <tr> <td>Jacqueline Elizabeth Shea</td> <td>10/08/2003</td> </tr> <tr> <td>Robert Graham Feldman</td> <td>10/07/2003</td> </tr> <tr> <td>Sylvain Gabriel Goutebroze</td> <td>09/12/2003</td> </tr> <tr> <td>Francois-Xavier Le Gros</td> <td>09/12/2003</td> </tr> </tbody> </table>		Name	Execution Date	Helen Rachel Crooke	10/07/2003	Jacqueline Elizabeth Shea	10/08/2003	Robert Graham Feldman	10/07/2003	Sylvain Gabriel Goutebroze	09/12/2003	Francois-Xavier Le Gros	09/12/2003
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<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;"><b>Name:</b></td> <td>Merial Limited</td> </tr> <tr> <td><b>Street Address:</b></td> <td>3239 Satellite Blvd.</td> </tr> <tr> <td><b>City:</b></td> <td>Duluth</td> </tr> <tr> <td><b>State/Country:</b></td> <td>GEORGIA</td> </tr> <tr> <td><b>Postal Code:</b></td> <td>30096</td> </tr> </table>		<b>Name:</b>	Merial Limited	<b>Street Address:</b>	3239 Satellite Blvd.	<b>City:</b>	Duluth	<b>State/Country:</b>	GEORGIA	<b>Postal Code:</b>	30096		
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<b>CORRESPONDENCE DATA</b>													
<p><b>Fax Number:</b> (678)638-3350  <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p><b>Phone:</b> 678-638-3805</p> <p><b>Email:</b> tiki.cantrell@merial.com</p> <p><b>Correspondent Name:</b> Judy Jarecki-Black, Ph.D., J.D.</p> <p><b>Address Line 1:</b> 3239 Satellite Blvd.</p> <p><b>Address Line 4:</b> Duluth, GEORGIA 30096</p>													
<b>ATTORNEY DOCKET NUMBER:</b>	MER FLH3171.2												
<b>NAME OF SUBMITTER:</b>	Tiki Cantrell												

CH \$40.00 12246809

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**PATENT**  
**REEL: 024421 FRAME: 0958**

Total Attachments: 6

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## Assignment

USA

Name(s) of Inventors

(1) Helen Rachel CROOKE (2) Jacqueline Elizabeth SHEA (3) Robert Graham FELDMAN  
(4) Sylvain Gabriel GOUTEBROZE (5) Francois-Xavier LE GROS

In consideration of the sum of one dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned, the undersigned agree(s) to assign, and hereby do(es) assign, transfer and set over to

Merial Limited, a company limited by shares registered in England and Wales (registered number 3332751) with a registered office at PO Box 327, Sandringham House, Sandringham Avenue, Harlow Business Park, Harlow, Essex CM19 5TG, England and domesticated in Delaware, USA as Merial LLC

(hereinafter designated as the Assignee) the entire right, title and interest for the United States, its territories, dependencies and possessions, in the invention, and all applications for patent and any Letters Patent which may be granted therefor, known as

Title: **ATTENUATED GRAM NEGATIVE BACTERIA**

for which the undersigned has (have) executed an application for patent in the United States of America

Date of Signing

of Application

on

Alternative

Identification

U.S. Application Serial Number 10/406,686

for filed applications

filed

April 3, 2003

- 1) The undersigned agree(s) to execute all papers necessary in connection with the application and any continuing or divisional applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary.
- 2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation or division thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.
- 3) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.
- 4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.
- 5) The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any division or divisions or continuing applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has/she has (they have) full right to convey the entire interest herein assigned, and that he has/she has (they have) not executed, and will not execute, any agreements in conflict herewith.
- 6) The undersigned hereby grant(s) to the attorney(s) identified in the Declaration/Power of Attorney for this patent application, the power to insert on this assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date 7/10/03 Signature of Inventor (1) Helen Crooke

Date 8/10/03 Signature of Inventor (2) Jacqueline Shea

Date \_\_\_\_\_ Signature of Inventor (3) \_\_\_\_\_

Date \_\_\_\_\_ Signature of Inventor (4) \_\_\_\_\_

Date \_\_\_\_\_ Signature of Inventor (5) \_\_\_\_\_

Date 8/04/2003 Witness [Signature]

Date 8/04/2003 Witness [Signature]

HPFD\FORMS\US-ASS

PATENT

REEL: 024421 FRAME: 0960

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Date 7/10/2003 Signature of Inventor (3) [Signature]

Date \_\_\_\_\_ Signature of Inventor (4) \_\_\_\_\_

Date \_\_\_\_\_ Signature of Inventor (5) \_\_\_\_\_

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RP/PTD\FORMS\US-ASS

## ASSIGNMENT

We, Helen Rachel CROOKE, Jacqueline Elizabeth SHEA, Robert Graham FELDMAN, Sylvain Gabriel GOUTEBROZE, and Francois-Xavier LE GROS; who reside respectively at: 545 Eskdale Road, Winnersh Triangle, Wokingham Berkshire RG41 5TU, United Kingdom, 545 Eskdale Road, Winnersh Triangle, Wokingham Berkshire RG41 5TU, United Kingdom, 545 Eskdale Road, Winnersh Triangle, Wokingham Berkshire RG41 5TU, United Kingdom, 12 Rue Dansard, 69007, Lyon, FRANCE, 85 Avenue de Gadagne, 69230, Saint Genis Laval, FRANCE; have made certain inventions or discoveries (or both) set forth in an application for Letters Patent of the United States of America entitled: **ATTENUATED GRAM NEGATIVE BACTERIA and MIERAL LIMITED**, a company limited by shares Registered in England and Wales No. 3332751, with registered office at P.O. BOX 327, Sandringham House, Sandringham Avenue, Harlow business Park, Harlow Essex CM19 5TG, England, and domesticated in Delaware, USA as **MIERAL LLC**, with a place of business at 3239 Satellite Blvd., Duluth, GA 30096-4640, USA, and which, together with its successors and assigns is hereinafter called "Assignee," is desirous of acquiring the title, rights, benefits and privileges hereinafter recited, and of confirming the same or any part thereof heretofore acquired by Assignee.

Now, therefore, for valuable consideration furnished by Assignee to us, receipt and sufficiency of which we hereby acknowledge, we hereby, without reservation:

1. Assign and convey to and confirm in Assignee the entire right, title and interest in and to said inventions and discoveries, said application for Letters Patent of the United States of America, any and all other applications for Letters Patent on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation and Convention applications based in whole or in part upon said inventions or discoveries or upon said applications, and any and all Letters Patent and reissues and extensions of Letters Patent granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said discoveries, said applications and said Letters Patent;

2. Authorize Assignee to file patent applications in any or all countries on any or all of said inventions and discoveries in our names or in the name of Assignee or otherwise as Assignee may deem advisable, under the International Convention or otherwise;

3. Authorize and request the Commissioner of Patents of the United States of America and the empowered officials of all other governments to issue or transfer all said Letters Patent to Assignee, as assignee of the entire right, title and interest therein or otherwise as Assignee may direct;

4. Warrant that we have not knowingly conveyed to others any right in said inventions, discoveries, applications or patents or any license to use the same or to make, use or sell anything embodying or utilizing any of said inventions or discoveries; and that we have good right to assign the same to Assignee without encumbrance;

5. Bind our heirs and legal representatives, as well as ourselves to do, upon Assignee's request and at its expense, but without additional consideration to us or them, all acts reasonably serving to assure that the said inventions and discoveries, the said patent applications and the said Letters Patent shall be held and enjoyed by Assignee as fully and entirely as the same could have been held and enjoyed by us or our heirs or representatives if this assignment had not been made; and particularly to execute and deliver to Assignee all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by Assignee; to communicate to Assignee all facts known to us relating to said inventions and discoveries or the history thereof; and to furnish Assignee with any and all documents, photographs, models, samples and other physical exhibits in our control or in the control of our heirs or legal representatives and which may be useful for establishing the facts of our conceptions, disclosures, and reduction to practice of said inventions and discoveries.

In testimony of which we have affixed our signatures.

\_\_\_\_\_  
Date of Signature

\_\_\_\_\_  
Signature: Helen Rachel CROOKE

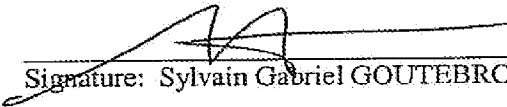
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Signature: Jacqueline Elizabeth SHEA

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Signature: Robert Graham FELDMAN

12 SEPTEMBER 2003  
Date of Signature

  
Signature: Sylvain Gabriel GOUTEBROZE

\_\_\_\_\_  
Date of Signature

\_\_\_\_\_  
Signature: Francois-Xavier LE GROS

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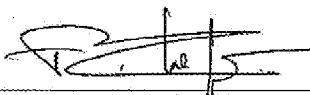
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