

## PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

| SUBMISSION TYPE:   | NEW ASSIGNMENT         |                        |                     |                   |            |            |                    |               |                |            |               |            |  |
|--|------------------------|------------------------|---------------------|-------------------|------------|------------|--------------------|---------------|----------------|------------|---------------|------------|--|
| NATURE OF CONVEYANCE:  | ASSIGNMENT             |                        |                     |                   |            |            |                    |               |                |            |               |            |  |
| CONVEYING PARTY DATA   |                        |                        |                     |                   |            |            |                    |               |                |            |               |            |  |
| <table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>Asya Grinberg</td><td>12/20/2007</td></tr><tr><td>John Knopf</td><td>01/02/2008</td></tr><tr><td>Robert S. Pearsall</td><td>12/20/2007</td></tr><tr><td>Ravindra Kumar</td><td>01/02/2008</td></tr><tr><td>Jasbir Seehra</td><td>01/02/2008</td></tr></tbody></table> | Name                   | Execution Date         | Asya Grinberg       | 12/20/2007        | John Knopf | 01/02/2008 | Robert S. Pearsall | 12/20/2007    | Ravindra Kumar | 01/02/2008 | Jasbir Seehra | 01/02/2008 |  |
| Name   | Execution Date         |                        |                     |                   |            |            |                    |               |                |            |               |            |  |
| Asya Grinberg  | 12/20/2007             |                        |                     |                   |            |            |                    |               |                |            |               |            |  |
| John Knopf   | 01/02/2008             |                        |                     |                   |            |            |                    |               |                |            |               |            |  |
| Robert S. Pearsall   | 12/20/2007             |                        |                     |                   |            |            |                    |               |                |            |               |            |  |
| Ravindra Kumar   | 01/02/2008             |                        |                     |                   |            |            |                    |               |                |            |               |            |  |
| Jasbir Seehra  | 01/02/2008             |                        |                     |                   |            |            |                    |               |                |            |               |            |  |
| RECEIVING PARTY DATA   |                        |                        |                     |                   |            |            |                    |               |                |            |               |            |  |
| <table border="1"><tr><td>Name:</td><td>Accelaron Pharma, Inc.</td></tr><tr><td>Street Address:</td><td>149 Sidney Street</td></tr><tr><td>City:</td><td>Cambridge</td></tr><tr><td>State/Country:</td><td>MASSACHUSETTS</td></tr><tr><td>Postal Code:</td><td>02139</td></tr></table>   | Name:                  | Accelaron Pharma, Inc. | Street Address:     | 149 Sidney Street | City:      | Cambridge  | State/Country:     | MASSACHUSETTS | Postal Code:   | 02139      |               |            |  |
| Name:  | Accelaron Pharma, Inc. |                        |                     |                   |            |            |                    |               |                |            |               |            |  |
| Street Address:  | 149 Sidney Street      |                        |                     |                   |            |            |                    |               |                |            |               |            |  |
| City:  | Cambridge              |                        |                     |                   |            |            |                    |               |                |            |               |            |  |
| State/Country:   | MASSACHUSETTS          |                        |                     |                   |            |            |                    |               |                |            |               |            |  |
| Postal Code:   | 02139                  |                        |                     |                   |            |            |                    |               |                |            |               |            |  |
| PROPERTY NUMBERS Total: 1  |                        |                        |                     |                   |            |            |                    |               |                |            |               |            |  |
| <table border="1"><thead><tr><th>Property Type</th><th>Number</th></tr></thead><tbody><tr><td>Application Number:</td><td>11982738</td></tr></tbody></table>   | Property Type          | Number                 | Application Number: | 11982738          |            |            |                    |               |                |            |               |            |  |
| Property Type  | Number                 |                        |                     |                   |            |            |                    |               |                |            |               |            |  |
| Application Number:  | 11982738               |                        |                     |                   |            |            |                    |               |                |            |               |            |  |
| CORRESPONDENCE DATA  |                        |                        |                     |                   |            |            |                    |               |                |            |               |            |  |
| Fax Number: (617)646-8646<br><i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>  |                        |                        |                     |                   |            |            |                    |               |                |            |               |            |  |
| Phone: 6176468000  |                        |                        |                     |                   |            |            |                    |               |                |            |               |            |  |
| Email: ccolbert@wolfgreenfield.com   |                        |                        |                     |                   |            |            |                    |               |                |            |               |            |  |
| Correspondent Name: Patricia Granahan  |                        |                        |                     |                   |            |            |                    |               |                |            |               |            |  |
| Address Line 1: 600 Atlantic Avenue  |                        |                        |                     |                   |            |            |                    |               |                |            |               |            |  |
| Address Line 4: BOSTON, MASSACHUSETTS 02210  |                        |                        |                     |                   |            |            |                    |               |                |            |               |            |  |
| ATTORNEY DOCKET NUMBER:  | A0904.70000US01        |                        |                     |                   |            |            |                    |               |                |            |               |            |  |
| NAME OF SUBMITTER:   | Patricia Granahan      |                        |                     |                   |            |            |                    |               |                |            |               |            |  |

CH \$40.00 11982738

500466294

PATENT  
REEL: 020522 FRAME: 0453

**Total Attachments: 3**

source=A0904.70000US01Assignment#page1.tif

source=A0904.70000US01Assignment#page2.tif

source=A0904.70000US01Assignment#page3.tif

**PATENT**

**REEL: 020522 FRAME: 0454**

## ASSIGNMENT

WHEREAS, we, Asya Grinberg, John Knopf, Robert Scott Pearsall, Ravindra Kumar, and Jasbir Seehra have invented a certain improvement in ALK1 RECEPTOR AND LIGAND ANTAGONISTS AND USES THEREOF described in an application for Letters Patent of the United States, the specification of which:

☐ is being executed on even date herewith; and is about to be filed in the United States Patent Office;

☒ was filed on **November 2, 2007** as Application No. **11/982,738**.

☐ was patented under U.S. Patent No. \_\_\_\_\_ on \_\_\_\_\_.

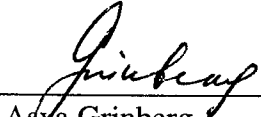
WHEREAS, **Acceleron Pharma, Inc.**, (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the State of Delaware, having principal offices at 149 Sidney Street, Cambridge, Massachusetts 02139 desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, our entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with our entire right, title and interest in and to said application and such Letters Patent as may issue thereon, and any reissue, continuation, divisional and foreign counterparts thereof and including the right to claim priority under any applicable statute, treaty or convention based on said application; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent, all choses in action pertaining to the applications or Letters Patent including the right to sue for and collect damages and other recoveries for past infringement thereof, all rights to initiate proceedings before government and administrative bodies, and all files, records and other materials arising from the prosecution, exploitation, or defense of rights and registrations pertaining to the applications or Letters Patent. We hereby acknowledge that this assignment, being of our entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any

and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

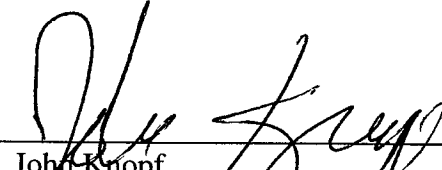
AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

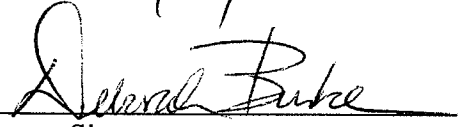
AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

Inventor  Date December 20, 2007  
Asya Grinberg

Witness Deborah Burke   
Printed Name Signature

Address 61 Warren Street, Waltham, MA 02453

Inventor  Date 1/2/08  
John Knopf

Witness Deborah Burke   
Printed Name Signature

Address 61 Warren Street, Waltham, MA 02453

Inventor Robert Scott Pearsall Date 12/20/07  
Robert Scott Pearsall

Witness Deborah Burke Deborah Burke  
Printed Name Signature

Address 61 Warren Street, Waltham, MA 02453

Inventor Ravindra Kumar Date 1/2/08  
Ravindra Kumar

Witness Deborah Burke Deborah Burke  
Printed Name Signature

Address 61 Warren Street Waltham, MA 02453

Inventor Jasbir Seehra Date 1/2/08  
Jasbir Seehra

Witness Deborah Burke Deborah Burke  
Printed Name Signature

Address 61 Warren Street, Waltham, MA 02453