

ASSIGNMENT

This Assignment Agreement is entered into by and between

STEVEN BENDER, c/o NOVARTIS INSTITUTE FOR FUNCTIONAL GENOMICS, INC., DBA GENOMICS INSTITUTE OF THE NOVARTIS RESEARCH FOUNDATION, 10675 JOHN JAY HOPKINS DRIVE, SAN DIEGO, CALIFORNIA 92121, UNITED STATES OF AMERICA, a citizen of UNITED STATES OF AMERICA;

TRACY CHARLTON, c/o NOVARTIS INSTITUTE FOR FUNCTIONAL GENOMICS, INC. , DBA GENOMICS INSTITUTE OF THE NOVARTIS RESEARCH FOUNDATION, 10675 JOHN JAY HOPKINS DRIVE, SAN DIEGO, CALIFORNIA 92121, UNITED STATES OF AMERICA, a citizen of CANADA

ANNA GALKIN, c/o NOVARTIS INSTITUTE FOR FUNCTIONAL GENOMICS, INC. , DBA GENOMICS INSTITUTE OF THE NOVARTIS RESEARCH FOUNDATION, 10675 JOHN JAY HOPKINS DRIVE, SAN DIEGO, CALIFORNIA 92121, UNITED STATES OF AMERICA S, a citizen of UNITED STATES OF AMERICA;

BERNHARD HUBERT GEIERSTANGER, c/o NOVARTIS INSTITUTE FOR FUNCTIONAL GENOMICS, INC., DBA GENOMICS INSTITUTE OF THE NOVARTIS RESEARCH FOUNDATION (GNF), 10675 JOHN JAY HOPKINS DRIVE, SAN DIEGO, CA 92121, UNITED STATES OF AMERICA, a citizen of GERMANY;

SCOTT MARTIN GLASER, c/o NOVARTIS INSTITUTE FOR FUNCTIONAL GENOMICS, INC. , DBA GENOMICS INSTITUTE OF THE NOVARTIS RESEARCH FOUNDATION, 10675 JOHN JAY HOPKINS DRIVE, SAN DIEGO, CALIFORNIA 92121, UNITED STATES OF AMERICA, a citizen of UNITED STATES OF AMERICA;

SHAILAJA KASIBHATLA, 13073 DRESSAGE LANE, SAN DIEGO, CALIFORNIA 92130, UNITED STATES OF AMERICA, a citizen of UNITED STATES OF AMERICA

MARK KNUTH, c/o NOVARTIS INSTITUTE FOR FUNCTIONAL GENOMICS, INC., DBA GENOMICS INSTITUTE OF THE NOVARTIS RESEARCH FOUNDATION, 10675 JOHN JAY HOPKINS DRIVE , SAN DIEGO, CALIFORNIA 92121, UNITED STATES OF AMERICA, a citizen of UNITED STATES OF AMERICA;

SABINE ROTTMANN, c/o NOVARTIS INSTITUTE FOR FUNCTIONAL GENOMICS, INC., DBA GENOMICS INSTITUTE OF THE NOVARTIS RESEARCH FOUNDATION, 10675 JOHN JAY HOPKINS DRIVE, SAN DIEGO, CALIFORNIA 92121, UNITED STATES OF AMERICA, a citizen of GERMANY;

**SARAH RUE, c/o NOVARTIS INSTITUTE FOR FUNCTIONAL GENOMICS, INC.,
DBA GENOMICS INSTITUTE OF THE NOVARTIS RESEARCH FOUNDATION,
10675 JOHN JAY HOPKINS DRIVE, SAN DIEGO, CALIFORNIA 92121, UNITED
STATES OF AMERICA, a citizen of UNITED STATES OF AMERICA;**

**GLEN SPRAGGON, c/o NOVARTIS INSTITUTE FOR FUNCTIONAL GENOMICS,
INC., DBA GENOMICS INSTITUTE OF THE NOVARTIS RESEARCH FOUNDATION,
10675 JOHN JAY HOPKINS DRIVE, SAN DIEGO, CALIFORNIA 92121, UNITED
STATES OF AMERICA, a citizen of UNITED KINGDOM;**

**TETSUO UNO, c/o NOVARTIS INSTITUTE FOR FUNCTIONAL GENOMICS, INC.,
DBA GENOMICS INSTITUTE OF THE NOVARTIS RESEARCH FOUNDATION,
10675 JOHN JAY HOPKINS DRIVE, SAN DIEGO, CALIFORNIA 92121, UNITED
STATES OF AMERICA, a citizen of JAPAN;**

(hereinafter "Inventor(s)"), and **NOVARTIS INSTITUTE FOR FUNCTIONAL
GENOMICS, INC., dba GENOMICS INSTITUTE OF THE NOVARTIS RESEARCH
FOUNDATION, 10675 JOHN JAY HOPKINS DRIVE, SAN DIEGO, CALIFORNIA
92121 UNITED STATES OF AMERICA**, a company organized under the laws of THE
STATE OF DELAWARE.

For good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, I/We the Inventor(s) do hereby confirm and agree that, by operation of law and/or contract, and/or by the fulfillment of any and all legal requirements regarding the transfer of employee inventions in my/our country of employment, NOVARTIS INSTITUTE FOR FUNCTIONAL GENOMICS, INC. is the true and lawful owner of all right, title and interest in all inventions, discoveries, patents/utility models, applications, and rights described in paragraphs (1) through (8) below.

If, however, under the laws of any country, I/We the Inventor(s) nevertheless have any ownership right, title or interest in any of the items described herein (which I/We do not believe to be the case and make no claim in or to), for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, I/We the Inventor(s) do hereby sell, assign and transfer to NOVARTIS INSTITUTE FOR FUNCTIONAL GENOMICS, INC. and its successors, assigns and legal representatives (hereinafter referred to collectively as the "ASSIGNEE"), all of our right, title and interest for all countries of the world in and to

(1) all of our inventions and discoveries described in the provisional or non-provisional patent, utility model, or other application(s) entitled

ANTIBODY DRUG CONJUGATES

and filed in the United States Patent and Trademark Office on 03 Feb, 2017 and accorded Application Number 62/454476 and/or filed as a PCT International Application on _____ and accorded International Patent Application Number PCT/ _____;

(2) the application(s) identified in paragraph (1), and all applications claiming priority from such application(s), directly or indirectly, including all national stages of any international patent application(s);

(3) the right to file patent, utility model, or other applications on any invention or discovery disclosed in any of the applications identified in paragraphs (1) and (2), including the right to file such applications on said inventions and discoveries in the names of ASSIGNEE or their designees or in our/my name, at ASSIGNEE's election and in accordance with applicable law in all countries and regions; and the right to file all patent, utility model, or other applications in all countries and regions claiming the priority of any of the provisional or non-provisional application(s) identified in paragraphs (1) or (2);

(4) all rights to claim priority from any of the applications referred to in paragraphs (1), (2), and (3) or from any application from which any of the applications referred to in paragraphs (1), (2) and (3) claim priority in all countries and regions under the Paris Convention for the Protection of Industrial Property, the WTO GATT TRIPS Agreement, the Inter-American Convention relating to Inventions, Patents, Designs, and Industrial Models and all other international agreements to which the United States now is or hereafter becomes a signatory and, if the United States patent application is a provisional patent application, under 35 USC 119(e);

(5) all continuations, continuations-in-part, and divisionals of any United States patent application(s) or international patent application(s) designating the United States, any national stages of any international application(s), and any other patent application(s) described in paragraphs (1) through (4) hereof, including further continuations, continuations-in-part, and divisionals such as, but not limited to, continuations of continuations and continuations of divisionals;

(6) all patents, utility models, or other grants that issue from any of the applications referred to herein and all rights and remedies associated therewith including the right to sue for and recover past damages and to recover under 35 U.S.C. § 154 (d) or any other law permitting remedies for infringement prior to issuance of the patent;

(7) all registrations and confirmations of, and importation certificates based upon, one or more of said patents, utility models, or other grants, and applications for such registrations, confirmations and importation certificates and;

(8) all reissues, renewals and extensions of said patents, utility models, registrations, confirmations and importation certificates, reexamination certificates issued for said patents and supplementary protection certificates based upon said patents and applications for such reissues, renewals, extensions, reexamination certificates and supplementary protection certificates, the same to be held and enjoyed by said ASSIGNEE to the full ends of the terms for which said patents, utility models, registrations, confirmations, importation certificates, reexamination certificates, supplementary protection certificates, reissues, renewals and extensions may be granted, as fully and entirely as the same would have been held and enjoyed by me/us if this sale, assignment and transfer had not been made.

I/We the Inventor(s) hereby authorize ASSIGNEE and their representatives to insert in paragraph (1) of this Assignment the filing date(s) and Application Number(s) of said patent, utility model, or other application(s) when notified thereof.

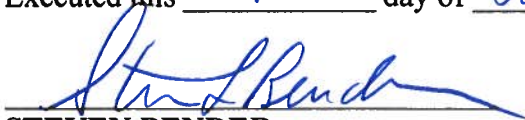
I/We the Inventor(s) hereby covenant and agree that I/We will, at any time, (i) upon the request, but at the expense, of ASSIGNEE, execute and deliver all documents that may be necessary or desirable to perfect the title to the foregoing inventions and discoveries, applications, patents, utility models, registrations, confirmations, importation certificates, reissues, renewals, extensions, reexamination certificates, supplementary protection certificates, and applications within the scope of (7) and (8), in ASSIGNEE, including the execution and procurement of all further documents evidencing this sale, assignment and transfer as may be necessary or desirable for recording the same in the patent office or other intellectual property office, agency or the like of any country or region, (ii) upon the request, but at the expense, of ASSIGNEE execute all additional applications within the scope of paragraphs (1) through (6) and all applications within the scope of (7) or (8), and (iii) make all rightful oaths and declarations and do all lawful acts requisite for procuring the same or for aiding therein, without further compensation, but at the expense of ASSIGNEE.

Should any provision of this Assignment be deemed invalid or unenforceable by reason of any law, statute, regulation or judgment, existing now or in the future in any jurisdiction, such provision shall be modified in such jurisdiction so as to nearly approximate the intent of the Parties. If this cannot be done, such invalid or unenforceable provision shall be divisible and be deleted in any such jurisdiction, and all other provisions shall remain in full force and effect. The modification or deletion of any provision in one jurisdiction shall have no effect on this Assignment in any other jurisdiction.

This Assignment shall be governed by the law of the State of Delaware.

This Assignment is effective as from the earliest priority date as stated above.

Executed this 9th day of January, 2018.


STEVEN BENDER

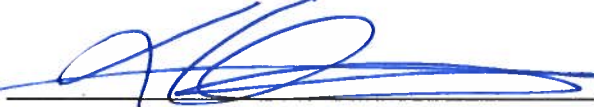
Witnessed by:


Name: Jill Kalliomaa
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121

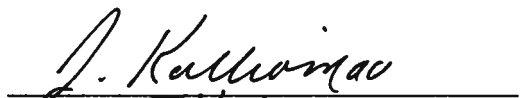
Witnessed by:


Name: SUSAN SESNOVICH
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121

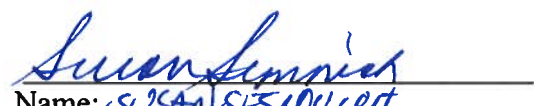
Executed this 10th day of January, 2018.


TRACY CHARLTON

Witnessed by:


Name: Jill Kalliomaa
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121

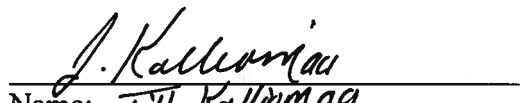
Witnessed by:


Name: SUSAN SESNOVICH
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121

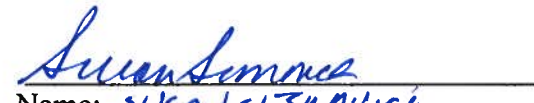
Executed this 9th day of January, 2018.


ANNA GALKIN

Witnessed by:


Name: Jill Kalliomaa
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121

Witnessed by:

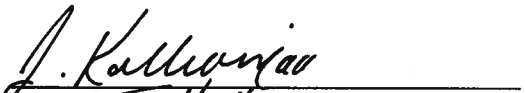

Name: SUSAN SESNOVICH
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121

Executed this 24 day of January, 2018.



BERNHARD HUBERT GEIERSTANGER

Witnessed by:


Name: J. Kalliomaa
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121

Witnessed by:


Name: SUSAN SESLOVICH
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121

Executed this 9 day of January, 2018.



SCOTT MARTIN GLASER

Witnessed by:


Name: Tammy Colsell
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121

Witnessed by:


Name: SUSAN SESLOVICH
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121

Executed this 10th day of January, 2018.



SHAILAJA KASIBHATLA

Witnessed by:


Name: Linda Faust
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121

Witnessed by:


Name: SUSAN SESLOVICH
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121

Executed this 9 day of January, 2018.

Mark W. Knuth
MARK KNUTH

Witnessed by:

J. Kalliomaa
Name: J. Kalliomaa
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121

Witnessed by:

Susan Semmich
Name: SUSAN SEMMICH
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121

Executed this 9 day of January, 2018.

S. Rottman
SABINE ROTTMAN

Witnessed by:

J. Kalliomaa
Name: J. Kalliomaa
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121

Witnessed by:

Susan Semmich
Name: SUSAN SEMMICH
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121

Executed this 9th day of January, 2018.

Sa Rue
SARAH RUE

Witnessed by:

J. Kalliomaa
Name: J. Kalliomaa
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121

Witnessed by:

Susan Semmich
Name: SUSAN SEMMICH
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121

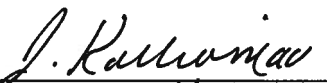
Executed this 9th day of January, 2018.



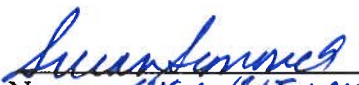
GLEN SPRAGGON

Witnessed by:

Witnessed by:



Name: Jill Kalliomaa
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121



Name: SUSAN SESNOVICH
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121

Executed this 9 day of January, 2018.



TETSUO UNO

Witnessed by:

Witnessed by:



Name: Jill Kalliomaa
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121



Name: SUSAN SESNOVICH
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121

NOVARTIS INSTITUTE FOR FUNCTIONAL GENOMICS, INC.

Executed this 1/30/2018 day of January, 2018.

BY Julie McCarthy
NAME: Julie McCarthy
Authorized Signatory

Witnessed by:

J. Kalliomaa
Name: J. Kalliomaa
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121

Witnessed by:

Susan Sesnovich
Name: SUSAN SESNOVICH
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121

ASSIGNMENT

This Assignment Agreement is entered into by and between **NOVARTIS INSTITUTE FOR FUNCTIONAL GENOMICS, INC., DBA GENOMICS INSTITUTE OF THE NOVARTIS RESEARCH FOUNDATION**, 10675 JOHN JAY HOPKINS DRIVE, SAN DIEGO, CALIFORNIA 92121 US, a company organized under the laws of THE STATE OF DELAWARE, and **NOVARTIS AG**, a company incorporated in Switzerland whose address is Lichtstrasse 35, 4056 Basel, Switzerland.

For good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, NOVARTIS INSTITUTE for Functional Genomics, Inc. does hereby sell, assign and transfer to and NOVARTIS AG and its successors, assigns and legal representatives (hereinafter referred to collectively as the "ASSIGNEE"), all of its right, title and interest for all countries of the world in and to

(1) all inventions and discoveries described in the provisional or non-provisional patent application(s) entitled

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and filed in the United States Patent and Trademark Office on 03 Feb, 2017 and accorded Application Number 62/454476 and/or filed as a PCT International Application on _____ and accorded International Patent Application Number PCT/ _____;

(2) the application(s) identified in paragraph (1), and all applications claiming priority from such application(s), directly or indirectly, including all national stages of any international patent application(s);

(3) the right to file patent, utility model, or other applications on any invention or discovery disclosed in any of the applications identified in paragraphs (1) and (2), including the right to file such applications on said inventions and discoveries in the names of ASSIGNEE or their designees, or on behalf or in the name(s) of the inventor(s) of said inventions and discoveries, at ASSIGNEE's election and in accordance with applicable law in all countries and regions; and the right to file all patent, utility model, or other applications in all countries and regions claiming the priority of any of the provisional or non-provisional application(s) identified in paragraphs (1) or (2);

(4) all rights to claim priority from any of the applications referred to in paragraphs (1), (2), and (3) or from any application from which any of the applications referred to in paragraphs (1), (2) and (3) claim priority in all countries and regions under the Paris Convention for the Protection of Industrial Property, the WTO GATT TRIPS Agreement, the Inter-American Convention relating to Inventions, Patents, Designs, and Industrial Models and all other international agreements to which the United States now is or hereafter becomes a signatory and, if the United States patent application is a provisional patent application, under 35 USC 119(e);

(5) all continuations, continuations-in-part, and divisionals of any United States patent application(s) or international patent application(s) designating the United States, any national stages of any international application(s), and any other patent application(s) described in paragraphs (1) through (4) hereof, including further continuations, continuations-in-part, and divisionals such as, but not limited to, continuations of continuations and continuations of divisionals;

(6) all patents, utility models, or other grants that issue from any of the applications referred to herein and all rights and remedies associated therewith including the right to sue for and recover past damages and to recover under 35 U.S.C. § 154 (d) or any other law permitting remedies for infringement prior to issuance of the patent;

(7) all registrations and confirmations of, and importation certificates based upon, one or more of said patents, utility models, or other grants, and applications for such registrations, confirmations and importation certificates and;

(8) all reissues, renewals and extensions of said patents, utility models, registrations, confirmations and importation certificates, reexamination certificates issued for said patents and supplementary protection certificates based upon said patents and applications for such reissues, renewals, extensions, reexamination certificates and supplementary protection certificates, the same to be held and enjoyed by said ASSIGNEE to the full ends of the terms for which said patents, utility models, registrations, confirmations, importation certificates, reexamination certificates, supplementary protection certificates, reissues, renewals and extensions may be granted, as fully and entirely as the same would have been held and enjoyed by NOVARTIS INSTITUTE for Functional Genomics, Inc. if this sale, assignment and transfer had not been made.

NOVARTIS INSTITUTE for Functional Genomics, Inc. hereby authorizes ASSIGNEE and their representatives to insert in paragraph (1) of this Assignment the filing date(s) and Application Number(s) of said patent, utility model, or other application(s) when notified thereof.

NOVARTIS INSTITUTE for Functional Genomics, Inc. hereby covenants and agrees that it will, at any time, (i) upon the request, but at the expense, of ASSIGNEE, execute and deliver all documents that may be necessary or desirable to perfect the title to the foregoing inventions and discoveries, applications, patents, utility models, registrations, confirmations, importation certificates, reissues, renewals, extensions, reexamination certificates, supplementary protection certificates, and applications within the scope of (7) and (8), in ASSIGNEE, including the execution and procurement of all further documents evidencing this sale, assignment and transfer as may be necessary or desirable for recording the same in the patent office or other intellectual property office, agency or the like of any country or region, (ii) upon the request, but at the expense, of ASSIGNEE execute all additional applications within the scope of paragraphs (1) through (6) and all applications within the scope of (7) or (8), and (iii) make all rightful oaths and declarations and do all lawful acts requisite for procuring the same or for aiding therein, without further compensation, but at the expense of ASSIGNEE.

Should any provision of this Assignment be deemed invalid or unenforceable by reason of any law, statute, regulation or judgment, existing now or in the future in any jurisdiction, such provision shall be modified in such jurisdiction so as to nearly approximate the intent of the Parties. If this cannot be done, such invalid or unenforceable provision shall be divisible and be deleted in any such jurisdiction, and all other provisions shall remain in full force and effect. The modification or deletion of any provision in one jurisdiction shall have no effect on this Assignment in any other jurisdiction.

This Assignment shall be governed by the laws of Switzerland.

This Assignment is effective as from the earliest priority date as stated above.

**NOVARTIS INSTITUTE FOR FUNCTIONAL GENOMICS, INC., DBA GENOMICS
INSTITUTE OF THE NOVARTIS RESEARCH FOUNDATION**

Executed this 30 day of January, 2018.

BY Julie McCarthy
NAME: Julie McCarthy
Authorized Signatory

Witnessed by:

J. Kallimay
Name: Jill Kallimay
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121

Witnessed by:

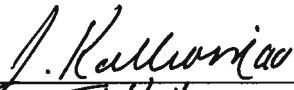
Susan Seasholtz
Name: Susan Seasholtz
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121

NOVARTIS AG

Executed this 30th day of January, 2018.

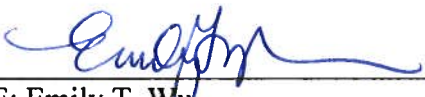
BY 
NAME: Kun Wang
Authorized Signatory

Witnessed by:

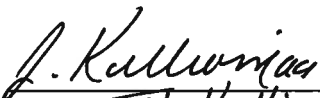

Name: Jill Kalliomäki
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121

Witnessed by:


Name: SUSAN SEIDOVITCH
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121

BY 
NAME: Emily T. Wu
Authorized Signatory

Witnessed by:


Name: Jill Kalliomäki
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121

Witnessed by:


Name: SUSAN SEIDOVITCH
Address: 10675 John Jay Hopkins Drive
San Diego, California 92121