## Columbia ${ }^{\text {dim }}$ TEChnology Ventures

## INVENTION REPORT AND RECORD PRIVILEGED AND CONFIDENTIAL

Information herein is submitted for purposes of seeking legal advice concerning patentability, copyrightability, etc. Such information is subject to legal and other review and confirmation.

Office of the General Counsel Columbia Technology Ventures

| TECHVENTURES OFFICE USE ONLY |  |
| :---: | :---: |
| IR\#: |  |
| Date Rec'd: | TLO: |
| OGC: | OLC: |
| Invention review (Pick one): $\square$ No Review Necessary Reason: $\qquad$ |  |
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| $\square$ URGENT IRM (WITHIN 48 With CTV/PLG/OLC REASON: $\qquad$ | WITh CTV/PLG onLy |
| $\square$ NO ASSESSMENT NEEDED Because: $\qquad$ |  |

## SECTION I: REQUIRED INFORMATION

| A. Potential Inventor(s): (inventorship subject to legal review) |  |
| :---: | :---: |
| Full Name | Full Name |
| Position | Position |
| Department(s) | Department(s) |
| Center(s) | Center(s) |
| University Address | University Address |
| Telephone | Telephone |
| CU email / UNI | CU email / UNI |
| Permanent Address | Permanent Address |
| City, State, Zip | City, State, Zip |
| Full Name | Full Name |
| Position | Position |
| Department(s) | Department(s) |
| Center(s) | Center(s) |
| University Address | University Address |
| Telephone | Telephone |
| CU email / UNI | CU email / UNI |
| Permanent Address | Permanent Address |
| City, State, Zip | City, State, Zip |

Please use additional copies of this page for more than four names
B. Title of the Invention: (should be brief and descriptive)

## - If any disclosure of the invention is anticipated, please provide details in Section E-

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## REQUIRED INFORMATION (cont'd)

## C. State, as fully as possible, what the invention is:

(including materials and components used; operative and preferred ranges of process parameters and concentration of chemical compounds; and foreseeable uses of the invention. Please also describe the commercial opportunity that this technology addresses, either below or in sections N-T. Supplemental material, such as publications, protocol, presentations, or images, may be included/attached when the form is submitted.)

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## SECTION II: CRITICAL INFORMATION

## Note: Please complete Sections D and E to ensure compliance with federal regulations.

D. Federal Grant/Contract or Subcontract Funding: (Include applicable center grants, e.g. MRSEC, NSEC etc.)

Was the invention conceived or first actually reduced to practice in the performance of work funded, in whole or in part, by any federal grant(s), contract(s) or subcontract(s)? If yes, list below.
Will any federal sponsoring entity be acknowledged if information related to this invention is published or disseminated to the scientific community? If yes, list below.

| Sponsor(s): | Grant/Contract Number(s): | Principal Investigator: | Administering Dept/Center: |
| :---: | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |

If any grants, contracts or subcontracts were awarded to an entity other than Columbia University, please specify which entities:

## E. Publication, Public Disclosure \& Other Activities:

Note: If the answer to any of the following questions is YES, please provide detailed information and attach any grants, abstracts, manuscripts, articles, presentations, etc. Please keep your Technology Licensing Officer informed of any future submission or acceptance for publication or other possible public disclosure of any manuscripts, abstracts or oral presentations describing the invention.

Has the invention been described in any publication(s) (including abstracts)?
$\square$ Yes $\square$ No

| Name of publication, journal or website | Date of publication |
| :---: | :---: |
|  |  |
|  |  |

Has a manuscript describing the invention been submitted for publication?

If yes, has it been accepted for publication at this time?
$\square$ Yes $\square$ No

| Name of publication, journal or website | Date of publication |
| :---: | :---: |
|  |  |
|  |  |

Has a description of the invention appeared online (including conferences and abstracts)?
If yes, please note the date(s) and details of the online disclosure:

| Was a grant application describing the invention submitted for review? |
| :--- |
| If yes, please note the date(s) and details of the grant application: |
| Was the invention disclosed publicly, such as in a poster session, presentation, or lecture? |
| If yes, please note the date(s) and details of the poster session, presentation or lecture: |
| No |

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| Was the invention or any derivative product sold, offered for sale, or used in public? |  |
| :--- | :--- |
| If yes, please note the date(s) and details of the derivative product: | $\square \mathrm{Yes} \square \mathrm{No}$ |
| Were any materials (biological or otherwise), documents, information or software related to the <br> invention provided or disclosed to any third party (including academia, industry or government)? <br> If yes, was there a confidentiality agreement in place? <br> If yes, please note the date and circumstances of the disclosure: | $\square \mathrm{Yes} \square \mathrm{No}$ |
| Are any of the above disclosures or activities contemplated in the near future? |  |
| If yes, please provide the details of any potential disclosures in the near future: |  |

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## SECTION III: THIRD-PARTY OBLIGATIONS

## F. Columbia Resources:

Please list all Columbia administrative units under whose auspices the inventors' research activities have been conducted which resulted in the invention:

| Columbia University <br> Dept/Center/Institute/etc. | Recipient Inventor | Type of Support (i.e. salary, space, other <br> financial, in kind, etc) |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  | $\square$ Yes $\square$ No | | Was the invention developed at the Shapiro Center for Engineering \& Physical Science Research (CEPSR)? |  |
| :--- | :--- |
| Was the invention developed at the Russ Berrie Medical Science Pavilion (Audubon II)? | $\square$ Yes $\square$ No |
| Was the invention developed in a NYSTEM funded facility at Columbia? | $\square$ Yes $\square$ No |

G. Is the invention related to any third party agreements not identified elsewhere on this form?

| Materials obtained from a third party, e.g., under a Material Transfer Agreement (MTA)? | $\square \mathrm{Yes} \square$ No |
| :---: | :---: |
| Did your invention utilize any materials that were created by or utilized the 'TET-System,' a tetracycline (or tetracycline analog) regulated gene expression technology, including both the overall system and any of its individual components? | $\square \mathrm{Yes} \square$ No |
| Equipment from a third party? | $\square \mathrm{Yes} \square$ No |
| Sponsored Research Agreements (SRAs)? | $\square \mathrm{Yes} \square$ No |
| Other? (such as Consulting Agreements) | $\square \mathrm{Yes} \square$ No |

If yes to any of the above, please provide details including agreement number and department:

| H. External Resources \& Funding: |  |
| :--- | :--- |
| Was any part of the invention developed in a non-Columbia owned facility? | $\square \mathrm{Yes} \square \mathrm{No}$ |
| Were St. Luke's Roosevelt resources used in the development of the invention? | $\square \mathrm{Yes} \square \mathrm{No}$ |
| Were any of the inventors funded by Howard Hughes Medical Institute (HHMI)? | $\square \mathrm{Yes} \square \mathrm{No}$ |
| Were any of the inventors funded by NY State Psychiatric Institute (NYSPI)? | $\square \mathrm{Yes} \square \mathrm{No}$ |
| Were any of the inventors funded by the Center for Advanced Technology (CAT)? | $\square \mathrm{Yes} \square \mathrm{No}$ |
| Were any of the inventors funded by a company based in the state of New York? | $\square \mathrm{Yes} \square \mathrm{No}$ |
| Was the invention developed using other funding sources, not previously described herein? | $\square \mathrm{Yes} \square$ No |
| Were any of the inventors funded by NYSTEM? | $\square \mathrm{Yes} \square \mathrm{No}$ |

If yes to any of the above, or if awards and/or support was provided by another source not listed above ( nonfederal grants, gifts, etc), please provide details:

| Award Source/Sponsor | Award \# | PI | Date Funded | If awarded to an entity other <br> than CU, please specify |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
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## d. Columbia|Technology Ventures

## I. Inventor Affiliations:

At the time of making an inventive contribution, were any potential inventors employees, officers, or students of an entity other than Columbia University?

If yes, please provide details:

At the time of the inventive contribution, were any inventors salaries paid by more than one entity or department/center concurrently (i.e., shared salaries)?

If yes, please specify which entity and the approximate percent of employment and relevance:

| Inventor | Entities/departments/centers | Percent employed at each |
| :---: | :---: | :---: |
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## J. Other Contributors

Did any person other than those named in Section A contribute any of the following to this invention? For software and other forms of copyrightable material, the University requires a list of all authors of code/text. We realize this may be wholly/partially redundant. It is necessary for legal reasons. $\qquad$
If yes, check all that apply

| $\square$ Software | $\square$ Text (document, questionnaire) | $\square$ Audio/Video recording |
| :--- | :--- | :--- |
| $\square$ Data/database |  | $\square$ Other copyrightable work |

If yes, please provide the following details about your selections above:
Details, including origin:
Website(s) and/or descriptions of the above materials:

| Author Full Name <br> (if an individual) | Institution/Company <br> (at time of <br> authorship) | Current <br> Institution/Company <br> (if different) | Email | Phone |
| :--- | :--- | :--- | :--- | :--- |
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|  |  |  |  |  |

Please deliver a complete/working copy of the above materials to: TechVentures@columbia.edu.
This may include source code, executables, screen shots, technical documentation, manuals, permissions, or license agreements governing your use of third party code and materials. If the material is too large to be emailed, please email TechVentures@columbia.edu to arrange for delivery.
Were any Biological Materials (e.g. plasmids, vectors, genetically engineered animals) from an outside party with whom Columbia has an agreement associated with the invention?

If Yes, please provide a copy of the relevant agreement(s) if available, i.e., MTA or Purchase agreements.

## SECTION IV: CONCEPTION DETAILS

## K. Fill in the following dates (if known):

Conception (Month/Day/Year):
First experiment demonstrating the invention (Month/Day/Year):

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## L. Records Supporting Invention:

Please identify records that establish dates of conception and reduction to practice, including the records’ present location and the identity of the person who prepared them. Attach copies, if possible. Note additional supporting evidence. If the invention or a significant aspect of the invention is not supported by written records, briefly describe how the date of invention can be established and identify the earliest written record.
M. Is the invention related to a prior invention reported to Columbia Technology

Ventures or elsewhere? If yes, please provide the information requested below.
Ownership (if not Columbia):
IR\# / Internal Ref \# or Title:

## SECTION V: COMMERCIAL POTENTIAL

N . Is research continuing on this invention at Columbia?
If yes, please describe research plans:

## O. What critical commercial problem does this invention solve?

P. Does the invention have relevance to an existing or emerging technical standard? A technical standard is a set of requirements for ensuring interoperability among devices or promoting reliability, productivity, efficiency, or safety of devices.

If yes, which standard(s)?:
Q. Specify the closest technologies or references known to you currently:
R. How does the invention differ from the closest technologies or references described above?
S. What advantages does the invention provide?
T. Other possible commercial applications for the invention include:
U. Which companies or investors are most likely to be interested in this invention?

If you can provide personal contacts at relevant companies, please list their name(s) and email(s) below:

## SUBMISSION ACKNOWLEDGEMENT - Please sign or type name below

Columbia University Inventor(s): Columbia University requires all potential inventors who are its faculty, officers, employees or students to sign or type their names below.
I/We submit this Invention Report and Record Form pursuant to Columbia's Statement of Policy on Proprietary Rights in the Intellectual Products of Faculty Activity, as amended (the "Policy"). I/We agree to assign, and do hereby assign, to Columbia all my/our rights, title, and interest in any invention described herein and agree to render such assistance as Columbia may reasonably request to obtain patents and develop the commercial value of such invention, including signing such documents as may be required for this purpose. I/We understand that Columbia will adhere to the terms of the Policy, which can be found in The Faculty Handbook or on Columbia Technology Ventures' website, www.techventures.columbia.edu, and will distribute any proceeds attributable to the invention according to those terms. I/We also understand that if Columbia decides not to seek protection for the invention, it will release its rights in the invention specifically described herein and to the extent actually developed as of the date of submission of this Invention Report and Record Form; provided, however, that I/we have met the obligations under the Policy with respect to disclosure of the invention and cooperation with Columbia. Any release of Columbia's rights in such invention may be subject to applicable restrictions or requirements imposed by the terms of any grant, contract or cooperative agreement to which Columbia is a party, or by applicable law, rule, or regulation.

| Signature or typed name of each potential inventor listed in | Date |
| :--- | :--- |
| Section A |  |$\quad$|  |
| :--- |
|  |

(Please use additional copies of this page if more signatures are required)
Please return this form to your Technology Licensing Officer or TechVentures@columbia.edu

You may also view information relating to your Invention Reports, Patents and Patent Applications here:
https://portal.techventures.columbia.edu/FacultyPortal/login.cfm Instructions for accessing the CTV Inventor Portal:

- Recommended browsers: Firefox or Chrome
- Login with your UNI and university password. Note: CTV does not have access to your UNI/password details. If you have any trouble, contact CUIT or visit http://cuit.columbia.edu/cuit/manage-my-uni
- Once logged in, you will be presented two links: IRs and Dockets
- To view the information, click on the "+" to the left of the table titles
- Information may be downloaded into an Excel spreadsheet

