REPBASE Subscription Agreement For Non-Profit, Governmental, and Educational Entities

This agreement ("Agreement") is effective the 6 day of May 2022 ("Effective Date")

By and between

PHOENIX BIOINFORMATICS CORPORATION of 39899 Balentine Drive, Suite 200 Newark, CA 94560, USA ("Phoenix")

and

University of California, San Diego having its institutional headquarters at 9500 Gilman Dr., La Jolla, CA 92093 ("Institution").

RECITALS

WHEREAS Phoenix has been granted by **Genetic Information Research Institute (GIRI)** of 20380 Town Center Lane, Suite 240, Cupertino, CA 95014, the right to enter into subscription agreements with third parties for access to proprietary databases and compiled materials of GIRI, comprising the Licensed Materials;

AND WHEREAS subject to the terms and conditions of this Agreement, Institution desires to access and utilize the Licensed Materials and Phoenix wishes to grant access to the Licensed Materials,

IT IS AGREED AS FOLLOWS:

Article 1. DEFINITIONS

The following terms shall have the following meanings:

- 1.1 "Licensed Materials" means Repbase. Repbase is a database of prototypic sequences representing repetitive DNA from different eukaryotic species, and is being used in genome sequencing projects worldwide as a reference collection for masking and annotation of repetitive DNA.
- 1.2 "Authorized User" means current members of the faculty, staff, and graduate or undergraduate student body of Institution (each as applicable).
- 1.3 "Authorized Use" means non-commercial research conducted by Authorized Users.

Article 2. Grant of Rights

- 2.1 Phoenix, under rights licensed to it by GIRI, hereby grants to Institution the non-exclusive, revocable, non-sublicensable and non-transferable right, to give Authorized Users access to the Licensed Materials for Authorized Use, in accordance with the terms and conditions of this Agreement.
- 2.2 Institution acknowledges that Licensed Materials may contain or pertain to materials that are subject to proprietary rights, including copyright, trademark, and patent rights, of third parties, such as GIRI. GIRI owns all right, title and interest, including all intellectual property rights, in and to, the Licensed Materials and any updates, modifications, translations, adaptations, derivative works and/or additions thereto. No licenses or rights to such proprietary rights are granted hereunder other than as expressly set forth herein. If Institution elects to provide or make available to GIRI or Phoenix any suggestions, comments, ideas, improvements, or other feedback or materials related to the Licensed Materials or otherwise (collectively, "Suggestions"), GIRI shall own such Suggestions and be free to use, disclose, reproduce, modify, license, transfer and otherwise utilize and distribute such Suggestions in any manner with no compensation or credit.
- 2.3 The rights granted hereunder by Phoenix are subject to a master agreement between GIRI and Phoenix ("Master Agreement").
- 2.4 The scope of the rights granted herein expressly excludes the right to provide repeat masking, repeat identification or genome data analysis services to any third parties, including, without limitation, individuals not affiliated with Institution, or to other academic institutions, nonprofit organizations, or companies. Such rights, if available, must be licensed from Phoenix Bioinformatics or GIRI under a separate agreement.

Article 3. Fees and Payment

- 3.1 In consideration of the licenses granted hereunder, Institution agrees to pay fees according to the amounts, schedule, and payment terms set forth in Appendix A.
- 3.2 Institution's right to access the Licensed Materials is conditional upon Phoenix's receipt of payment in accordance with Appendix A. If payment is not received in accordance with Appendix A Phoenix reserves the right to immediately and without notice, either suspend Institution's access to the Licensed Materials or to terminate this Agreement. Institution is required to pay any amounts still owed to Phoenix at the time Institution's account is suspended or terminated. Institution is solely responsible for determining and paying any tax liabilities incurred by Institution as a result of payments made under this Agreement.

Article 4. Access and Usage

- 4.1 Access to the Licensed Materials is controlled by authenticated Internet Protocol ("IP") address or ranges of IP addresses, as further described in Appendix A and Appendix B. Access methods for the Licensed Materials covered under this agreement include:
 - 4.1a Use of the Repbase website to browse, search and view information.
 - 4.1b Use of Repbase CENSOR online tool for Repeat Masking.
 - 4.1c Download of Repbase datafiles from the Repbase website.
 - 4.1d Download of Repbase software from the Repbase website.
 - 4.1e Browse and/or download of Repbase Reports from the Repbase website.
 - 4.1f Submissions to Repbase Reports and Repbase
- 4.2 Institution's Authorized Users may print out or copy into digital media limited excerpts of the Licensed Materials for its Authorized Uses. In conjunction with this Authorized Use, Institution's Authorized Users may also publish data comprising limited excerpts of the Licensed Materials, as reasonably necessary to support bona fide research projects, provided that Repbase is attributed as the source of any such published data in accordance with https://www.girinst.org/repbase/update/howtocite.html.
- 4.3 Other than as expressly authorized by GIRI, Institution and its Authorized Users will not otherwise copy, download, upload or in any other way reproduce comprehensive or substantial portions of the Licensed Materials. Institution and its Authorized Users will not sell, lease, rent, distribute, sublicense, provide access to, or transfer the Licensed Materials in whole or part, to third parties except under the fair use exceptions of 4.4 below. Institution and its Authorized Users will not modify or remove any copyright, trademark, patent, disclaimer notices, proprietary markings or restrictive legends placed on the Licensed Materials. Institution and its Authorized Users will not: (i) modify, reverse engineer, decompile or disassemble the Licensed Materials, except to the extent that the foregoing restriction is expressly prohibited by applicable law or (ii)use or provide access to the Licensed Materials on an application service provider, software-as-a-service or service bureau basis.
- 4.4 Institution represents that (i) it has the right to enter into this Agreement; (ii) the performance of its obligations and use of the Licensed Materials will not violate any applicable laws, rules, regulations or to Institution's knowledge cause a breach of any agreements with any third parties; and (iii) Institution will use the Licensed Materials for lawful purposes and in accordance with the terms and conditions of this Agreement.

Article 5. Provision of Access to the Licensed Materials

- 5.1 Under Phoenix's agreement with GIRI, GIRI will make reasonable efforts to make online access to the Licensed Materials available on a continuous basis. Availability will be subject to periodic interruption and downtime for server maintenance, software installation or testing, loading new files, and other reasons at the discretion of GIRI. Phoenix will provide reasonable technical support and assistance to enable Institution's access to the Licensed Materials, at specified hours during Pacific Time Zone business hours.
- 5.2 Institution acknowledges that GIRI reserves the right at any time to withdraw from the Licensed Materials any item or part of an item for which it no longer retains the right to publish, or which it has reasonable grounds to believe infringes copyright or is defamatory, obscene, unlawful or otherwise objectionable, or for any other reason.
- 5.3 Institution is responsible for providing any hardware, software, facilities, equipment, telecommunications circuits or bandwidth and other resources required to access, download and print the Licensed Materials. Institution's access and use of the Licensed Materials may be monitored by Phoenix, GIRI or a third party authorized by Phoenix and/or GIRI with respect to number of sessions, elapsed time spent accessing the service, number of Authorized Users or computers accessing the Licensed Materials and/or the volume of Licensed Materials downloaded or printed by Institution for the purposes of compiling aggregate use statistics and monitoring compliance with this Agreement.

Article 6. Disclaimers and Limitations of Liability

- 6.1 Neither GIRI nor Phoenix are responsible for the content of any Licensed Materials comprising opinions, advice, statements, services, offers, or other information or content expressed or made available by third parties.
- 6.2 Neither GIRI nor Phoenix guarantee the accuracy, completeness, or usefulness of any Licensed Materials. No assurance is provided by GIRI or Phoenix that the Licensed Materials will reflect the most recent findings or developments with respect to research in genomics, bioinformatics or repeat sequence prediction.
- 6.3 PHOENIX MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF DESIGN, ACCURACY OF THE INFORMATION CONTAINED IN THE LICENSED MATERIALS, MERCHANTABILITY OR FITNESS OF USE FOR A PARTICULAR PURPOSE. THE LICENSED MATERIALS ARE SUPPLIED 'AS IS'.
- 6.4 UNDER NO CIRCUMSTANCES WILL PHOENIX AND INSTITUTION BE LIABLE TO EACH OTHER OR ANY OTHER PERSON, INCLUDING BUT NOT LIMITED TO AUTHORIZED USERS, FOR ANY SPECIAL, EXEMPLARY, INCIDENTAL OR

CONSEQUENTIAL DAMAGES OF ANY CHARACTER ARISING OUT OF THIS AGREEMENT.

Article 7. Term and Termination

- 7.1 This Agreement will remain in place from the Effective Date until the end of the subscription period specified in Appendix A. If a notice of intent not to renew this Agreement is not received from Institution prior to the last day of the subscription period, Phoenix may, at its sole discretion, automatically renew this Agreement for an additional one-year term under the same terms and conditions of this Agreement, with the exception that a price increase of 3% will be applied to each subsequent one-year term extension.
- 7.2 If either party commits a material or persistent breach of any term of this Agreement, and such breach is capable of remedy, and the breaching party fails to remedy the breach within thirty (30) days of notification in writing by the other party, the non-breaching party will have the right to terminate this agreement by providing written notice of termination to the breaching party. This right of termination will persist so long as the breaching party remains in breach. For clarity, the foregoing is applicable only in the event of a breach which is capable of remedy. If the breach is not capable of remedy, the non-breaching party may terminate the Agreement immediately by providing written notice of termination to the breaching party.

Furthermore, this Agreement shall be terminated:

- 7.2(a) if Institution defaults in making payment of the Fee as provided in this Agreement; or
- 7.2(b) if either party becomes insolvent or becomes subject to receivership, liquidation or similar external administration.
- 7.3 On termination or expiration of this Agreement, all rights and obligations of the parties automatically terminate except Paragraph 4.3 (prohibition on unauthorized distribution of Licensed Materials to third parties), Article 6 (Disclaimers, Limitations on Liability, Indemnity), Paragraph 7.3 (survival), Paragraph 7.4 (right to injunctive relief in the event of unauthorized distributions of Licensed Materials), and Article 8 (General), which shall remain in force.
- 7.4 Phoenix has a contractual obligation to GIRI to protect the proprietary and copyright rights of GIRI in the database and compilations comprising the Licensed Materials. Institution hereby acknowledges that the business of Phoenix is dependent upon maintaining control of the Licensed Materials, and that any breach of the prohibitions of Paragraph 4.3 or any other unauthorized reproduction, distribution, or furnishing of access to the Licensed Materials constitutes a

fundamental breach of this Agreement, in which event, this Agreement will immediately terminate and Phoenix will be entitled to immediate injunctive relief without any rebate of the fees paid by Institution and without prejudice to any other rights or remedies to which Phoenix may be entitled.

7.5 Upon expiration of this Agreement or termination of this Agreement other than for breach of Paragraph 4.3 or any other unauthorized reproduction, distribution, or furnishing of access to the Licensed Materials, Institution may retain and continue to use any Licensed Materials obtained in accordance with the terms of this Agreement during the period this Agreement was in force for its Authorized Use as specified in Paragraph 4.2.

General

- 8.1 This Agreement constitutes the entire agreement of the parties and supersedes all prior communications, understandings and agreements relating to the subject matter of this Agreement, whether oral or written. This Agreement may be executed in one or more counterparts, each of which will be deemed an original, but all of which together will constitute a single instrument.
- 8.2 Modifications to terms of this Agreement will be valid only if they are recorded in writing and signed by both parties.
- 8.3 Either party to this Agreement may assign this Agreement to a successor which has acquired substantially all the assets of that party by operation of merger, purchase, or otherwise, provided that the assignee agrees in writing to assume all the obligations of the assigning party under this Agreement. No other assignment is permitted by Institution. Furthermore, this Agreement will be assigned to GIRI in the event of termination of the Phoenix-GIRI agreement under which Phoenix has the authority to grant this license. Any assignment contrary to this section shall be null and void.
- 8.4 All notices, consents, approvals or requests under this Agreement will be in writing and shall be deemed given when: (1) mailed (by registered or certified mail, return receipt requested) to the receiving party at the address specified below (which may be amended by providing written notification of change of address to the other party); or (2) emailed, but only to the extent that receipt of such email is expressly acknowledged by the receiving party.

The corresponding addresses of the parties are as follows:

PHOENIX BIOINFORMATICS CORPORATION

[Text deleted]

University of California, San Diego

[Text deleted]

- 8.5 Neither party's delay or failure to perform any provision of this Agreement, as result of circumstances beyond its control (including, without limitation, war, terrorism, strikes, floods, governmental restrictions, power, telecommunications or Internet failures, or damage to or destruction of any network facilities) will be deemed to be, or to give rise to, a breach of this Agreement.
- 8.6 The invalidity or un-enforceability of any provision of this Agreement will not affect the continuation or enforceability of the remainder of this Agreement.
- 8.7 Either party's waiver, or failure to require performance by the other, of any provision of this Agreement will not affect its full right to require such performance at any subsequent time, or be taken or held to be a waiver of the provision itself.
- 8.8 Phoenix compiles and displays a list of institutional subscribers for informational purposes only. Institution agrees to allow Phoenix to share the identity and contact information for authorized signing representative from Institution with GIRI, and agrees to receive communications relating to Repbase directly from GIRI. No endorsement by subscribing parties is implied. Institution's name will be added to the list of institutional subscribers, unless Institution elects otherwise by notification of Phoenix in writing that it does not want to be listed.
- 8.9 Nothing contained in this Agreement shall be construed to create a partnership or joint venture among the parties hereto or make either party an agent of the other for any purpose whatsoever.

IN WITNESS WHEREOF, the Parties have caused the Agreement to be executed by their duly authorized representatives as of the Effective Date recited on Page 1:

PHOENIX	INSTITUTION	
[Text deleted]	[Text deleted]	
Signature	Signature	
[Text deleted]	[Text deleted]	
Name	Name	
_Account Executive Title	AUL Scholarly Resources and Services Title	
5/4/2022	5/2/2022	
Date	Date	

APPENDIX A

LICENSED MATERIALS, SUBSCRIPTION PERIOD, INVOICING AND PAYMENT

THE LICENSED MATERIALS

TitleSubscription PeriodFeeREPBASE05/06/2022 - 05/05/2025[Text deleted]

Within a reasonable period following the Effective Date of this Agreement, Phoenix will provide an invoice to Institution at the following address:

University of California, San Diego 9500 Gilman Drive La Jolla, CA 92093

All amounts due under this Agreement are payable in United States currency within sixty (60) days after invoicing by Phoenix. Payment may be made by check made out to Phoenix Bioinformatics Corporation, or by ACH transfer. In the event of an ACH transfer payment, Institution will be responsible for payment of all bank fees and other taxes or charges associated with such ACH transfer. **To ensure**Institution's payments are applied to the correct invoice in a timely manner, Institution must include invoice numbers on all check remittances, and include it as the reference number on ACH payments.

ACH TRANSFER INFORMATION

Domestic Transfer, US Dollars:

[Text deleted]

International Transfer, US Dollars:

[Text deleted]

<u>International Transfer, Other Currency:</u>
Please contact us for wire transfer instructions

APPENDIX B

Authorized Users will be recognized and authenticated by domain name and IP address and/or range.

List of addresses (including country where applicable) of Institution's Premises or sites, Domain Name(s) and IP addresses and/or ranges:

Class B Network: first two network numbers plus asterisks for host addresses, i.e.: 125.64.*.* Class C network: first three network numbers plus an asterisk for host address, i.e.: 125.64.133.* Single station: all four numbers, i.e. 125.64.133.20; or ranges, i.e. 125.64.133.20-125.64.133.40

Network contact:						
	[Text deleted]		Telephone:	[Text deleted]		
	E-mail address:	[Text deleted]				

Institution name & address	Domain name(s)	IP addresses/ranges
Fill in	Fill in	Fill in
		Attached
University of California,		
San Diego		
9500 Gilman Dr.		
La Jolla, CA 92093		