

**U. S. Department of Agriculture
Agricultural Research Service**

MATERIAL TRANSFER AGREEMENT

This Agreement is authorized by the Federal Technology Act and is governed by its terms.

PARTIES:

AIPL: Dr. Derek Bickhart
Research Geneticist
USDA, ARS, AIPL
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BFGL: Dr. George E. Liu
Research Biologist
USDA, ARS, BFGL
10300 Baltimore Ave, Beltsville, MD 20705-2350
Tel: (301) 504-9843
FAX: (301) 504-8414
E-mail: george.liu@ars.usda.gov

SEMEX: Dr. Jacques Chesnais
Director of Research
The Semex Alliance
130 Stone Rd. W.
Guelph, Ontario
Tel: (613) 226-3965
E-mail: jpchesnais@rogers.com

PURPOSE:

SEMEX will provide BFGL with Ayrshire DNA samples hereinafter also collectively referred to as the Samples.

BFGL will sequence the Ayrshire DNA samples and provide both AIPL and Semex with the raw sequencing data; hereinafter also collectively referred to as the Raw Data. BFGL will also grant AIPL access to adequate computer resources in order to analyze the data.

AIPL will provide SEMEX and BFGL with a comprehensive list of sequence variants called from the Raw Data as well as providing technical know-how for the duration of the project; hereinafter collectively referred to as the Analysis.

The Samples, Raw Data and Analysis provided by the above parties shall hereinafter be collectively referred to as the Material.

The Material is released by the providing Party (hereinafter "Provider") to the receiving Party (hereinafter "Recipient") under the following conditions:

1. The Analysis and Raw Data provided to SEMEX shall only be used for genetic evaluation, selection purposes and research projects related to variant discovery.
2. The Samples and Analysis provided to BFGL shall only be used for genetic evaluation, selection purposes and research projects related to variant discovery.
3. The Raw Data provided to AIPL shall only be used for genetic evaluation, selection purposes and research projects related to variant discovery.
4. Recipient shall not transfer the Raw Data and Analysis, in whole or in part, to a third party without express written consent of Provider. Any third party requesting a sample shall be referred to Provider.
5. The Samples, Raw Data and Analysis shall remain the property of Provider and shall not be used for commercial or profit making purposes without an appropriate license or other permission from Provider.
6. Recipient shall keep Provider informed of the results obtained from the Analysis, provide Provider with a copy of any manuscript that describes Recipients work with the Analysis prior to submission for publication, and acknowledge Provider's contribution to the work reported.
7. If publication of any portion of the raw data portion of the Material is required by a peer-reviewed scientific journal, the Recipient shall request permission from the Provider at least sixty (60) days in advance of submitting the manuscript. The Provider shall have sixty (60) days to respond to this request. If a response is not received, the Recipient shall assume that permission has been granted for this request.
8. SEMEX shall not in any way state or imply that this Agreement or the results of this Agreement is an endorsement by ARS of its organizational units, employees, products, or services except to the extent permission is specifically granted by an authorized representative of ARS.
9. The Parties acknowledge and agree to comply with all applicable laws and regulations of the

Animal Plant Health and Inspection Service, the Center for Disease Control, and /or Export Control Administration pertaining to possession or transference of technical information, biological materials, pathogens, toxins, genetic elements, genetically engineered microorganisms, vaccines, and the like.

10. Recipient shall assume sole responsibility for any claims or liabilities that may arise as a result of the Recipient's use of the Material
11. PROVIDER GIVES NO WARRANTIES OR GUARANTEES, EXPRESSED OR IMPLIED, FOR THE MATERIAL, INCLUDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.
12. Material shall be returned, destroyed, or otherwise disposed of, as instructed by Provider, no later than the expiration of this Agreement.
13. Recipient shall meet with Provider's representatives to determine inventorship if an invention should arise from Recipient's work with the Material.
14. The provisions of this Agreement are to be deemed severable and the invalidity, illegality or unenforceability of one or more of such provisions shall not affect the validity, legality or enforceability of the remaining provisions.

15. Confidentiality:
- a. The Parties shall not disclose Material marked “Confidential” or “Proprietary” to any third party nor use such Confidential Information for any other purpose than that given above without the written permission of the providing Party.
 - b. Each Party shall use the same degree of care to protect Confidential Information received under this Agreement as it uses to protect its own information of a similar nature, but in any event not less than reasonable care under the circumstances.
 - c. Confidential Information shall be excluded from confidentiality if the receiving Party can demonstrate that (a) it had possession of the information prior to disclosure, or (b) the information generally is available to the public at the time of disclosure, or becomes generally available, after disclosure, through no fault of receiving Party; or (c) receiving Party receives the information from a third party having the right to the information and who does not impose confidentiality obligations on the receiving Party.
 - e. It shall not be a breach of this Agreement if the receiving Party is required to disclose the Confidential Information by a valid order of a court or other government body, or as otherwise required by law, or as necessary to establish the rights of either party under this Agreement; PROVIDED THAT the receiving Party shall provide prompt prior notice thereof to providing Party to enable that Party to seek a protective order or otherwise prevent such disclosure, and PROVIDED FURTHER THAT the Confidential Information otherwise shall continue to be confidential.
 - f. ARS will treat all information generated or gathered under this agreement in accordance with the Freedom of Information Act.
16. This Agreement may be executed in any number of counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. Signature by facsimile shall also bind each of the parties to this Agreement.
17. ARS is an agency of the U.S. Government and any rights or obligations created under this Agreement are freely transferable within the U.S. Government and shall not be deemed an “transfer.”
18. If the Parties hereto decide, at some future date, to engage in a cooperative research project or program using the Material, a formal Cooperative Research and Development Agreement, or other research agreement, must be negotiated and entered into between the Parties.
19. This Agreement shall be construed in accordance with United States of America Federal Law

as interpreted by the Federal Courts in the District of Columbia.

- 20. Either party may unilaterally terminate this entire Agreement at any time by giving the other party written notice not less than sixty (60) calendar days prior to the desired termination date.

This Material Transfer Agreement shall become effective upon date of final signature and shall continue in effect for a period of two (2) years; provided, however, that the obligations assumed by a receiving Party, regarding the maintenance of confidentiality, under this Agreement shall remain in effect for two (2) years from the expiration of this Agreement.

ACCEPTED FOR THE AGRICULTURAL RESEARCH SERVICE

James A. Poulos, III (Technology Transfer Coordinator)

Date

ACCEPTED FOR THE COOPERATOR:



 Signature

Nov 14 / 2013

 Date

JACQUES CHESNAIS

Typed Name

*

By signing below, the ARS Scientists and ARS Research Leader acknowledge that they have read, understood, and agreed to the terms and conditions of this Agreement.



 Dr. Derek Bickhart (ARS Scientist)

11/15/13

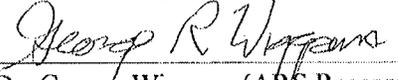
 Date



 Dr. George E. Liu (ARS Scientist)

11/25/13

 Date



 Dr. George Wiggans (ARS Research Leader)

11/15/13

 Date