



**MEMORANDUM OF UNDERSTANDING OF
COOPERATION BETWEEN
HARBIN VETERINARY RESEARCH INSTITUTE,
CHINESE ACADEMY OF AGRICULTURAL
SCIENCES
AND THE UNIVERSITY OF TEXAS MEDICAL
BRANCH AT GALVESTON**

Harbin Veterinary Research Institute, Chinese Academy of Agricultural Sciences, with its legal address and premises at No. 678 Haping Road, Xiangfang District, Harbin, Heilongjiang Province, China 150069 (hereinafter referred to as **"HVRI"**)

AND

The University of Texas Medical Branch, with its legal address and premises at 301 University Blvd, Galveston, Texas 77550 (hereinafter referred to as **"UTMB"**)

HVRI and UTMB hereinafter also individually referred to as **"Party"** or collectively as the **"Parties"**

The parties reached and confirmed with the Memorandum of Understanding (hereinafter referred to as **"Memorandum"**) their consensus to establish exchanges and collaboration in areas of mutual interest and benefit.

I. GENERAL PROVISION

i) Relationship between the parties

Nothing contained herein shall be construed as establishing a relationship of agent and principal or master and servant between the parties. Each party shall have full control of its operations and undertakings and shall have full responsibility for activities and duties carried by it and on its behalf.

ii) Good faith and fairness

- a) The parties undertake to act in good faith with respect to each other's rights under the obligations and objectives of this MoU.
- b) The parties, their representatives, their researchers and personnel shall not, either during or after the term of this MoU, disclose proprietary information relating to the undertaking by both parties and each other's operations without the consent of the other party.
- c) The parties recognize the impracticality of providing for every contingency, which may arise during or after the life of the MoU and hereby agree to operate fairly and without detriment to the interests of either of them.

iii) Notices

Any notice, request or consent required or permission to be given or made pursuant to this MoU shall be in writing. Any such notice, request or consent shall be deemed to have been given or made when delivered either in person to the authorized representative at the Head Office of the party to whom communication is addressed or when sent by registered mail or by fax to such party at the following address:

For: Harbin Veterinary Research Institute

The Director General: Dr. Bu Zhigao

No. 678 Haping Road

Harbin, Heilongjiang Province 150069

The People's Republic of China

Tel: (0086) 451-51051727

E-mail: buzhigao@caas.cn

For: The University of Texas Medical Branch

Dr. James LeDuc

301 University Blvd, 77550

Galveston, Texas

The United States

Tel:

E-mail: jwleduc@UTMB.edu

Provided that a party may change its physical address and email for notice hereunder by giving the other party notice of such change pursuant to this clause.

Proof of posting or dispatch shall be deemed to be proof of receipt:

- a) In the case of a letter, on the 10th day after posting.
- b) In the case of email, on the day immediately following the date of dispatch, but the sender has to confirm receipt of the same by the other party by telephone.

Without prejudice to the foregoing provisions, any notice shall be sent by the quickest means reasonable available.

II. OBJECTIVES OF THE COOPERATION

The objectives of the cooperation between HVRI and UTMB are as follows:

- to promote the research cooperation between China and the United State for controlling infectious diseases, protecting laboratory safety and global health security;

- to deepen the training and education of all parties to this MoU; and
- to strengthen the academic and talent exchanges between the parties.

III. CONTENTS OF THE COOPERATION

To achieve these objectives, HVRI and UTMB will, insofar as the means of each allow:

- promote talent and education exchanges by initiating visiting scientists and post-doctoral education programs;
- receive researchers, technicians and students of both parties for periods of training, study and/or research;
- organize symposia, conferences, short courses, workshops and meeting on research issues;
- carry out joint research programs and apply for international grants with joint efforts;
- exchange information pertaining to developments in teaching, faculty, staff and student development and research at each institution and
- exchange the virus resources strictly for the scientific research purposes.

IV. MANAGEMENT SYSTEM OF THE MOU

i) HVRI and UTMB will provide necessary supports to the MoU. If necessary the parties can communicate for asking other scientific research units in globe to participate in relevant scientific research activities in this MoU.

ii) Each party shall designate a coordinator to oversee and facilitate the implementation of this MoU. The coordinators, working with other appropriate administrators at the respective institutions, shall have the following responsibilities:

- to promote academic collaboration at both researchers, technicians and student levels for research, training and study;
- to act as principal contracts for individual and group activities and to plan and coordinate all activities under this MoU within their institutions as well as with the other party;
- to distribute to each party information about the faculty, facilities, research, publications, library materials and educational resources of the other party; and
- to meet periodically to review and evaluate past activities and to work out new ideas for future cooperative agreements.

V. INTELLECTUAL PROPERTY

Both parties do agree that:

i) Title rights, copy rights, patent rights or any other intellectual rights in Intellectual Property belonging to either party prior to this MoU shall remain with said Party. Title rights, copy rights, patent rights or any other intellectual rights in any Intellectual Property generated from

information and data collected and analyzed under the MoU shall be the property of both HVRI and UTMB.

ii) That prior to any disclosure of proprietary information by one party to the other concerning specific aspect of this collaboration, the one party may require the other to execute a confidentiality agreement.

iii) Once HVRI and UTMB are satisfied that a given discovery ("Invention") arising from a joint project under the MoU is worth protecting by a patent, the Parties will negotiate in good faith to establish the terms of an "Inter-Institutional Agreement" or IIA, or such other agreements as may be appropriate, setting forth, amongst other things, the parties' agreement on the control of patent prosecution, administration and maintenance and on the responsibility for further research, development and commercialization of the Invention and associated rights. The parties intend that the terms of any Inter-Institutional Agreement shall outline each Party's assumption of equal responsibilities in administration of any patent obtained under this MoU. Responsibility for expenses relating to registration, administration and further development and exploitation of the invention (including funds to the inventors to carry out further work to bring the invention to a stage where it can be commercially exploited, researching for commercial outlets, advertising expenses, and fees for patent attorneys) will be agreed upon by both parties. Any decision relating to the commercial exploitation or to the manner of disposal of the patent shall be made jointly taking into consideration the patent regulations of each party in particular the role of the inventor with commercialization revenues received for the Invention or the rights therein to be shared equally among the parties according to their shares in the Invention.

iv) Material for publication or presentation arising from the joint research projects under the MoU shall be submitted for clearance to the two parties to ensure that no patentable discoveries are published prior to protection by patents.

v) Any scientific publications resulting from the collaborative research under the MoU, including scientific papers, books and proceedings of conferences, seminars and workshops will be authored jointly to reflect where relevant contributions have been made and quoting the names of authors and the two parties as well as the donor agencies if applicable.

VI. FUNDING

It is understood and agreed that HVRI and UTMB will each be responsible for their own expenses incurred in the performance of the collaborative research programs under this MoU. Neither party is under obligation to fund the portion of the collaborative research program conducted by the other party.

VII. ADMINISTRATION OF THE MOU

Both parties agree (that):

a. This MoU shall be identified only as the current wish and intent of the Parties regarding the potential for developing a program agreement, executed between the parties.

b. Further agreements concerning any program shall be independent of this MoU and shall provide details concerning the specific commitments made by each party and shall not become effective until they have been reduced to writing and executed by the duly authorized representatives of the parties.

c. Any collaborative research agreement, or similar arrangement related to scientific development and/or discovery, shall be separately negotiated and a written agreement

executed by and between the parties for each such arrangement.

d. To work out mechanisms of reviewing and evaluating the impact of the MoU every year and at the end of the MoU duration and to monitor implementation of any on-going activities.

e. To advise either party on available areas of collaboration and advise the Chief Executives of the institutions through a written report on the progress of the collaboration or on any need to amend or review the same.

VIII. DURATION OF THE MOU

The MoU will remain in force for five (5) years at the end of which both parties will review and may renew the collaboration.

IX. EFFECTIVE DATE

i) This memorandum shall become effective immediately from the date of the last signature by the appropriately authorized officers of each of the two institutions.

ii) This memorandum may be extended by both parties' written consent after the expiration of the MoU.

X. MODIFICATION/AMENDMENTS

i) Modification of the terms and conditions of this MoU may only be made by written agreement between the parties, duly signed by authorized officers of both parties and the same will be incorporated in the annexure of this Memorandum of Understanding.

ii) Either party wishing to modify/ or amend the MoU shall give the other party two (2) months written notice of such intentions and shall send the proposed modifications/amendments within the two (2) months notice period.

iii) The modification/amendments proposal will be discussed between the parties who will make recommendations to the Chief Executives of the institutions who will execute the modified/amended MoU.

XI. SUSPENSION

i) In the event of one party not fulfilling its part of the obligations as spelt out in this MoU and the aggrieved party is being adversely affected, the aggrieved party is at liberty to suspend the MoU with immediate effect and call for renegotiating within 7 to 21 days.

ii) In the event of the other party not availing itself for renegotiating with the aggrieved, the aggrieved party may give the other party a notice of termination but in the meantime handle the cause of grievance/dispute in the best way possible to avoid further deterioration/harm occurring.

XII. TERMINATION

i) Either party may terminate the MoU if the other party is in breach of terms and conditions of this MoU. The aggrieved party shall give the other party three (3) months notice of the termination of the MoU; provided that the other party has been given a one (1) month notice and the breach has not been rectified.

ii) Either party may terminate this MoU without cause and without penalty by giving three (3) months written notice to the other Party.

iii) In the event of such termination of the MoU any on-going activity under the collaboration shall be dealt with as shall be mutually agreed by the two institutions.

iv) Where such activity involves students, the parties shall ensure that the students shall be able to complete their studies.

v) Any gains or losses in the pursuance of the objectives of this MoU that shall have been incurred at the time of termination shall be shared in mutually agreed ratios.

XIII. SETTLEMENT OF DISPUTES

i) The parties shall use their efforts to settle amicably all disputes arising out of or in connection with this MoU and/or its interpretation hereof.

ii) Any dispute, difference or question which may arise at any time between the parties, which cannot be settled amicably within thirty (30) days after receipt by one party of the other party's request for such amicable settlement shall be referred to the decision of a single arbitrator to be agreed upon between the two parties or in default of agreement within 14 days of each party raising such dispute.

iii) Any party not satisfied with the arbitration, shall have the right to seek justice in the Courts of law.

XIV. INDEMNITY

The parties do agree that if a legal suit arises with regard to the management and/or administrative in-capabilities and/or lapses that may arise as a result of action or inaction on the part of party, which may have led to either party being sued individually, jointly or severally, each party shall be responsible for its own legal fees and other expenses.

XIV. EXPORT CONTROL

The parties acknowledge that this Agreement and the performance thereof are subject to compliance with any and all applicable Chinese and United States laws, regulations, or orders, including those that may relate to the export of technical data, and both Parties agree to comply with all such laws, regulations and orders. The Parties agree that if the U.S. export laws and/or those of the People's Republic of China are or become applicable, neither Party will export any Materials or information deemed Export Controlled, received under this Agreement to any countries for which the United States or Chinese government requires an export license or other supporting documentation at the time of export or transfer, unless said Party has obtained prior written authorization from the appropriate authority responsible for such matters.

VI. FORCE MAJEURE

Both parties shall be released from their respective obligation in the event of national emergency, war, prohibitive governments' regulations or of any other cause beyond the reasonable control of the parties or either of those that render the performance of this MoU impossible whereupon moneys due under this agreement shall become due and payable.

The MoU will consist of four numbered copies of equal value. Each Party will retain two copies and can make further copies as required.

XVII. CONFIDENTIALITY

i) All cooperation and exchanges documents, data, details and materials shall be treated as confidential information by the parties.

ii) The party may not make use of their mutual dealings for advertising purposes without the other's prior written consent.

iii) The confidentiality obligation shall be applicable throughout the duration of this MoU and after it has been terminated. The party is entitled to ask the other to destroy and/or return the secret files, materials and equipment without any backups.

In witness whereof the parties have affixed their common seals on this day of2017.

HARBIN VETERINARY RESEARCH THE UNIVERSITY OF TEXAS
INSTITUTE, CHINESE ACADEMY OF MEDICAL BRANCH
AGRICULTURAL SCIENCES

By: *Bu Zhiguo*

Name: Bu Zhiguo

Title: General Director

Date: 2017-8-8

Place: Harbin, P.R.China

By: *Carolee A. King*

Name: Carolee A. King, JD

Title: Senior VP and General Counsel

Date: 10/20/17

Place: UTMB-Galveston, TX

Read and understood: *Jing Zhang*

24. 10. 2017

Signature of HVRI Coordinator

Read and understood:

James LeDuc

Signature of UTMB Investigator
(Coordinator)

Dr. James LeDuc

Content reviewed

Alastair