MEMORANDUM OF AGREEMENT BETWEEN THE PET INDUSTRY JOINT ADVISORY COUNCIL (PIJAC) AND THE UNIVERSITY OF TENNESSEE INSTITUTE OF AGRICULTURE (UTIA) FOR COORDINATING ACTIVITIES OUTLINED IN THE SOCIOECONOMIC

EPIDEMIOLOGY OF DISEASE RISK IN WILDLIFE TRADE NETWORKS GRANT AWARDED BY THE UNIVERSITY OF TENNESSEE ONE HEALTH INITIATIVE

AGREEMENT NUMBER 1

This is a memorandum of agreement (MOA) between the PIJAC located at 1615 Duke Street, Alexandria, VA 22314 and the UTIA located at 2621 Morgan Circle, Knoxville, TN 37996. When referred to collectively, the PIJAC and the UTIA are referred to as the "Parties."

1. BACKGROUND: This MOA builds upon the cooperation outlined in the Memorandum of Understanding entered into by PIJAC and UTIA to collaborate on research focused on the impacts and movements of pathogens in the U.S. amphibian trade network.

2. AUTHORITIES:

1. Pet Industry Joint Advisory Council

The PIJAC is a non-profit, service-oriented organization comprised of members from every segment of the pet industry. These include importers and exporters of live organisms, retail pet stores, product manufacturers, other industry trade associations in the United States and other countries, as well as hobby clubs and aquarium societies. PIJAC, a non-profit corporation organized pursuant to the laws of the District of Columbia, enters this MOU pursuant to the approval of its Board of Directors.

2. University of Tennessee Institute of Agriculture

The UTIA is at the core of the University of Tennessee's land-grant mission of educating, discovering, and connecting through the work of faculty, staff and students. The institute's four units—the Herbert College of Agriculture, the College of Veterinary Medicine, UT Ag Research, and UT Extension—contribute to improving the quality of life and enhancing the agricultural economics, environment, and health of Tennesseans and beyond. (https://utia.tennessee.edu/leadership/).

UTIA will excel as an Institute by developing solutions and services that advance agriculture, education, natural resource management, human and animal health, and our communities. (https://utia.tennessee.edu/our-institute/)

To accomplish this vision, UTIA will:

- Connect across strengths within UTIA and with partners.
- Focus on grand challenges and established priorities.
- Help people and communities adapt to an ever-changing world.

3. PURPOSE AND SCOPE: The purpose of this MOA is to identify roles and responsibilities of the parties to coordinate activities outlined in the "Socioeconomic Epidemiology of Disease Risk in Wildlife Trade Networks," seed grant proposal funded by the University of Tennessee (UT) One Health Initiative (OHI). The intent of the parties is to work out logistics for distribution of socioeconomic surveys and pathogen surveillance kits in the U.S. amphibian pet trade network. The parties also intend to collect preliminary data on industry and consumer behaviors and practices, industry economics, and pathogen prevalence in and movement between different components (nodes) of the U.S. amphibian pet trade network. Ultimately, these efforts will provide the foundation for organizing expanded sampling efforts and evaluating mitigation strategies in the future, contingent on availability of additional funds.

4. RESPONSIBILITIES OF THE PARTIES:

4.1. The UTIA will—

4.1.1. Articulate project scope and intended activities, deliverables, and expected benefits of the research, as outlined in UT OHI proposal, to the PIJAC.

4.1.2. Design and develop a socioeconomic survey with anonymized data collection to acquire preliminary information on the U.S. amphibian pet trade network. UTIA will seek input and feedback from PIJAC and its partners on survey design and options for distribution to industry and consumers.

4.1.3. Provide pathogen surveillance test kits to interested PIJAC members.

4.1.4. Provide preliminary information on industry and consumer behaviors, industry economics, and amphibian pathogen prevalence, contingent upon the data collected.

4.1.5. Build a simplified model to determine optimal locations in the U.S. amphibian pet trade network to sample in the future, and identify which factors should be measured to detect changes in disease dynamics, contingent upon data availability.

4.2. The PIJAC will—

4.2.1 Assist with socioeconomic surveys (as needed) by:

- a. Establishing connections between UTIA and industry partners that are potentially interested in this project.
- b. Reviewing and providing suggestions for content and phraseology in survey questionnaires, required disclaimers, and project marketing materials that are developed.

- c. Helping with marketing communications between UTIA and industry partners to foster participation in socioeconomic surveys.
- d. Facilitating distribution of socioeconomic surveys to target audiences in the U.S. amphibian pet trade network, including industry nodes and consumers.
- e. Serving as an advocate of the pet industry to ensure adequate steps are taken by UTIA to protect the identity or other sensitive proprietary information of industry partners.
- 4.2.2 Assist with pathogen surveillance (as needed) by:
 - a. Facilitating connections between UTIA and industry partners that are potentially interested in beta testing pathogen surveillance test kits. In particular, efforts will be made to establish relationships with importer, breeder and retailer nodes.
 - b. Helping with marketing the opportunity for gratis amphibian pathogen surveillance among PIJAC members.
 - c. Facilitating distribution of pathogen surveillance kits to industry partners and data anonymization.

4.3. Both Parties will:

4.3.1. Collaborate on creation and distribution of materials for surveys and surveillance test kits used to facilitate research outlined in the UT OHI seed grant proposal to include:

- a. Developing and implementing a plan of action for drafting, reviewing survey questions, and beta testing surveillance kits for approval by both parties prior to distribution, and
- b. Developing and implementing a plan of action to distribute surveys and surveillance kits to industry nodes and hobbyists, and securely process data to ensure results are anonymize and proprietary or sensitive information belonging to industry partners is protected.

5. PERSONNEL: Each Party is responsible for supervision and management of its personnel.

6. GENERAL PROVISIONS:

6.1. Nothing in this MOA authorizes any of the parties to obligate or transfer funds. Specific projects or activities that involve the transfer of funds, services, or property among the parties require execution of separate agreements and are contingent upon the availability of appropriated funds. Negotiation, execution, and administration of these agreements must comply with all applicable state laws.

6.2. POINTS OF CONTACT (POCs). The following POCs will be used by the Parties to communicate matters concerning this MOA. Each Party may change its POC upon reasonable notice to the other Party.

POC:

6.1.1. For the PIJAC—

6.1.1.1 Joshua Jones Deputy Director, Government Affairs Pet Industry Joint Advisory Council 1615 Duke Street, Ste. 100 Alexandria, VA 22314 202/452-1525 x1040 josh@pijac.org

6.1.2. For the UTIA—
6.1.2.1 Matthew J. Gray, Ph.D., Professor
Associate Director, UTIA Center for Wildlife Health University of Tennessee Institute of Agriculture 427 Plant Biotechnology Building 2505 E.J. Chapman Drive Knoxville, TN 37996 865/974-2740 mgray11@utk.edu

6.3. REVIEW OF AGREEMENT. If non-reimbursable, this MOA will be reviewed no less often than mid-point on or around the anniversary of its effective date in its entirety.

6.4. MODIFICATION OF AGREEMENT. This MOA may only be modified by the written agreement of the Parties, duly signed by their authorized representatives.

6.5. DISPUTES. Any disputes relating to this MOA will, subject to any applicable state law, be resolved by consultation between the Parties.

6.6. TERMINATION OF AGREEMENT. This MOA may be terminated by either Party by giving at least 30 days' written notice to the other Party. The MOA may also be terminated at any time upon the mutual written consent of the Parties.

6.7. TRANSFERABILITY. This MOA is not transferable except with the written consent of the Parties.

6.8. ENTIRE AGREEMENT. It is expressly understood and agreed that this MOA embodies the entire agreement between the Parties regarding the MOA's subject matter, thereby merging and superseding all prior agreements and representations by the Parties with respect to such subject matter.

6.9. EFFECTIVE DATE. This MOA takes effect beginning on the day after the last Party signs.

6.10. EXPIRATION DATE. This MOA expires two (2) years from the date of signature.

6.11. NO THIRD-PARTY BENEFICIARIES. Nothing in this MOA, express or implied, is intended to give to, or will be construed to confer upon, any person or entity not a party any remedy or claim under or by reason of this MOA and this MOA will be for the sole and exclusive benefit of the Parties.

6.12. SEVERABILITY. If any term, provision, or condition of this MOA is held to be invalid, void, or unenforceable by a governmental authority and such holding is not or cannot be appealed further, then such invalid, void, or unenforceable term, provision, or condition shall be deemed severed from this MOA and all remaining terms, provisions, and conditions of this MOA shall continue in full force and effect. The Parties shall endeavor in good faith to replace such invalid, void, or unenforceable term, provision, or condition with valid and enforceable terms, provisions, or conditions which achieve the purpose intended by the Parties to the greatest extent permitted by state law.

AGREED: [Approval authority signatures will never be alone on a blank page]

For the [First Party]-Robert Likins

Vice President of Government Affairs Pet Industry Joint Advisory Council

(Date)

For The University of Tennessee

DocuSigned by: Cynthia Mchols

Cynthia Nichols Budget Director, AgResearch University of Tennessee, Institute of Agriculture

3/15/2021

(Date)

Mid-Point Review Due Date:

[Enter date mid-point review due]

Mid-Point Review completed by:

Signature and Name of Reviewer