

BYLAWS

Animal Health and Nutrition Consortium

North Carolina State University

Effective January 01, 2021

A. GENERAL

1. SCOPE

These Bylaws are made a part of the Animal Health and Nutrition Consortium (AHNC) membership agreement and shall govern the organization and operation of the Consortium with respect to administration, membership, reports, confidentiality of information, and rights to research results.

2. DEFINITIONS

UNIVERSITY: North Carolina State University (NC STATE).

CONSORTIUM: AHNC, the organization in which the MEMBER, UNIVERSITY and Faculty experts in Animal Health, Nutrition, Precision Technologies, and Data Analytics operate.

MEMBER: the individual dues-paying organization that has joined the CONSORTIUM.

CONSORTIUM Faculty: the UNIVERSITY faculty who are involved in AHNC research activities and work within the framework of these Bylaws.

3. PURPOSE

The purpose of this CONSORTIUM is to promote innovation and advances in production and companion animal health and welfare, with a special focus on gut health, nutrition, using precision technologies and Artificial Intelligence Big Data analytics. The CONSORTIUM will accomplish this through:

- Increased research output
- Attract new funding opportunities
- Become an internationally recognized entity for research partnership
- Address grand challenges and emerging issues
- Develop novel areas of research
- Increase outreach and public awareness
- Provide excellence in education, mentoring and training
- Support and encourage entrepreneurship and commercialization
- Build inter-disciplinary research collaborations that span multiple colleges within UNIVERSITY and with other institutions.

The CONSORTIUM's objectives include:

1. Provide MEMBERS with opportunities to access UNIVERSITY know-how, biological materials, computer software, and technology developed by participating UNIVERSITY researchers.
2. Provide MEMBERS with opportunities to attend presentations on new research initiatives proposed by UNIVERSITY researchers involved in the CONSORTIUM.
3. Provide MEMBERS with opportunities to propose research ideas to be conducted by CONSORTIUM Faculty.
4. Provide MEMBERS with opportunities to interact with faculty, students, technicians and researchers participating in CONSORTIUM activities.
5. Provide eligible MEMBERS with rights to intellectual property generated by CONSORTIUM research.

B. ORGANIZATIONAL STRUCTURE

1. MEMBERSHIP

Membership of the CONSORTIUM shall be open on an annual basis. A MEMBER may leave the CONSORTIUM at any time. Upon leaving the CONSORTIUM, the MEMBER shall have no further right to share in the research results generated under the CONSORTIUM or in any intellectual property resulting therefrom. MEMBERS that leave and subsequently rejoin the CONSORTIUM will not have access to research results generated or in any intellectual property resulting therefrom while not a MEMBER.

MEMBERS should acknowledge results that were generated by the CONSORTIUM (e.g., in their presentations, organization literature, IP) with a statement that includes the "Animal Nutrition and Health Consortium".

Membership dues will be paid annually. The annual dues, which are nonrefundable, shall be payable on or before January 1, preceding the annual meeting for that year (January 1 – December 31). Annual dues will be used to fund Core research projects selected by the Industrial Advisory Board (IAB) and to support costs related to administration and marketing of the CONSORTIUM.

Full Membership costs \$50,000 per year. Full voting rights (2 votes) are assigned to any FULL MEMBER company. Any company with more than 500 employees or annual gross sales of more than \$50 million must obtain Full Membership.

Associate Membership costs \$25,000 per year. Limited voting rights (1 vote) are assigned to any ASSOCIATE MEMBER company. Small Businesses may apply for Associate Membership. A Small Business is defined as a company with fewer than 500 employees and less than \$50 million in annual gross sales. A Small Business MAY join as a FULL MEMBER but a company that does

not meet both criteria as a Small Business (fewer than 500 employees and less than \$50 million in annual gross sales) may NOT join as an ASSOCIATE MEMBER.

Mirror Membership. Subject to unanimous preapproval by the IAB, which approval shall be recorded in writing, and subject to the limitations set forth in this paragraph, FULL and ASSOCIATE MEMBERS may extend its membership benefits to no more than one of its majority-owned subsidiaries or to no more than one company that is majority owned by the same parent company. The designated subsidiary will be required to co-sign the membership Agreement executed by a FULL or ASSOCIATE MEMBER and will obtain the status of a MIRROR MEMBER. A MIRROR MEMBER shall not be required to pay membership fees, and shall have no representation on the IAB, no voting rights, and no rights to UNIVERSITY INVENTIONS other than described under Section C of these Bylaws “Intellectual Property Policy Regarding Core Research” and as defined in that Section.

Non-Profit/Commodity Group/Integrators Membership \$0 per year (no annual dues). Companies with federally-approved not-for-profit status, industry commodity groups, and any vertically integrated food animal production company that controls their feed manufacturing, source of commercial stock, pre-harvest production, and post-harvest processing are eligible to join the CONSORTIUM under this category of membership. Such MEMBERS are allowed to attend annual meetings of the CONSORTIUM, suggest research, outreach or extension topics, and to interact more closely with faculty, staff, students and industry MEMBERS. Non-Profit/Commodity Group MEMBERS have no voting rights, no representation on the IAB and no CONSORTIUM rights to UNIVERSITY INVENTIONS.

“In-Kind” Full Membership may be granted as an exception for one year at a time upon unanimous approval of the IAB and as reflected in the Board meeting minutes. “In-Kind” Full memberships require serious contributions to CONSORTIUM activities. Equipment, supplies and production services are examples of “in-kind” support as long as the support is relevant to the research priorities for the CONSORTIUM. The “in-kind” MEMBER will sign a standard membership agreement and receive benefits equivalent to those of a MEMBER organization that joins with an annual cash contribution. A formal letter from the company with detailed description of “in-kind” contribution and its monetary value is required.

“In-kind” Associate and “In-kind” Non-Profit membership is not allowed.

Membership options are summarized in the table below.

Membership Tier	Company/ Organization Type	Annual Fee (non-refundable)	Benefits	Membership Term
Full	Large Business	\$50,000 May obtain “in-kind” membership status	Full Voting Rights (2 votes) Representation on the IAB, access to CONSORTIUM IP Eligible to fund Enhancement Project(s)	3 years with the right to terminate at any time
Associate	Small Business	\$25,000	Limited Voting Rights (1 vote) Representation on the IAB, access to CONSORTIUM IP Eligible to fund Enhancement Project(s)	3 years with the right to terminate at any time
Non-Profit/ Commodity Group//Integrators	Entities with federally approved not for profit status and industry commodity groups	\$0	Participation in the annual AFNC meeting	2 years with the right to terminate at any time

CONSORTIUM PROJECTS

Core Projects

Core projects are funded from the pooled membership dues paid by CONSORTIUM MEMBERS, and require IAB approval. Core projects to be funded for the next year normally are approved at the annual meeting of the IAB.

Enhancement Projects

When a certain FULL, ASSOCIATE, or INTEGRATOR MEMBER wants to provide additional funds to enhance or accelerate a currently-funded Core project they may do so as an Enhancement project (see Appendix A). Only MEMBERS in good standing (i.e., current on paying the annual

dues) are eligible to sponsor an Enhancement Project. Non-profit/Commodity group MEMBERS are not eligible to fund Enhancement projects.

Limited exclusive rights to any intellectual property resulting from Core or Enhancement funding (as detailed in Section C below) may be requested by a MEMBER, but approval must be obtained from the IAB and the UNIVERSITY. The IAB can vote to grant restrictive rights to IP to less than ALL CONSORTIUM MEMBERS ONCE they know about the IP they are forgoing – this can only happen at or near the end of a project. Except for those instances involving limited exclusive rights, Enhancement projects do not require additional approval of the IAB, though the Director generally will keep the IAB informed.

Non-Core Projects

The CONSORTIUM may apply for and conduct sponsored projects, funded by a MEMBER, that are outside of the scope of Core or Enhancement projects. Such projects are subject to a separate sponsored project agreement, the terms of which are negotiated by the UNIVERSITY's Office of Sponsored Programs and Regulatory Compliance Services (SPARCS) as with any other sponsored project funded by an external sponsor. The IAB should be apprised of the existence of such agreements on a periodic basis but the results of Non-Core projects need not be shared with other MEMBERS.

ADMINISTRATION

The CONSORTIUM will be administered through the Prestage Department of Poultry Science in the UNIVERSITY's College of Agriculture and Life Sciences, and will be governed by the regulations of the UNIVERSITY. The functions and responsibilities of individuals and committees in the CONSORTIUM are as follows:

1. CONSORTIUM Director

The principal officer of the CONSORTIUM will be the CONSORTIUM Director. The Director is appointed by the Associate Dean of Research of the College of Agriculture and Life Sciences and Head of the Prestage Department of Poultry Science. The primary responsibilities of the Director are to oversee the day-to-day administrative operations of the CONSORTIUM and to work with the CONSORTIUM Faculty to implement research. The Director is responsible for oversight of research, for protection of intellectual property and for filing of invention disclosures and patents as required by UNIVERSITY policies and contracts.

2. Industrial Advisory Board (IAB)

The IAB will consist of one representative and an alternate from each eligible MEMBER. The responsibility of the representative and the alternate is to communicate results from the work of the CONSORTIUM to their companies and to represent their companies in the CONSORTIUM.

IAB representatives will also advise the CONSORTIUM Faculty about the needs of their organization and the industry in general as they relate to the proposed research of the CONSORTIUM.

IAB Members are expected to attend the annual meeting. A company may send additional representatives to attend the annual meeting provided that the Director is notified.

The IAB may recommend modifications of the Bylaws to the CONSORTIUM Director.

All IAB members will have the opportunity to review proposed projects, provide advice on the relative merits and economic potential of the projects and select via voting the projects to be funded from membership dues on an annual basis.

3. CONSORTIUM Faculty

All faculty members of the UNIVERSITY are eligible to become CONSORTIUM faculty. Faculty members involved in any CONSORTIUM projects as Principal Investigator (PI) or Co-Investigator (Co-I) are considered members of the CONSORTIUM Faculty. In addition, the Director may invite additional faculty to become CONSORTIUM Faculty.

4. ANNUAL REVIEW MEETING

The annual review meeting will serve as a forum for MEMBERS to become familiar with results generated from Core projects funded with membership dues. New Core research proposals will also be presented. Any confidential information presented at the annual review meeting will be identified as being proprietary and will be subject to the confidentiality obligations detailed in the Confidentiality Policy under Section C.3 of these Bylaws.

5. REPORTING

A confidential written report detailing activities performed during the previous year will be furnished to all CONSORTIUM MEMBERS before the annual review meeting, along with a final report 30 days after the termination of their project.

C. POLICIES

1. INTELLECTUAL PROPERTY (IP) POLICY REGARDING CORE RESEARCH

- (a) For the purposes of this Section C.1 the term MEMBERS includes only FULL MEMBERS and ASSOCIATE MEMBERS.

CORE RESEARCH is defined as research supported solely by membership dues and does not include research 1) carried out under separate contract; 2) supported by public funds; or 3) carried out independently by a MEMBER outside of the CONSORTIUM activities.

- (b) Title to any invention or discovery made or conceived and actually or constructively reduced to practice in the performance of CORE RESEARCH (“UNIVERSITY INVENTION”) shall remain with the UNIVERSITY, provided, however, that the UNIVERSITY shall grant to each MEMBER, whose membership dues are not overdue on the date such invention or discovery is made, a non- exclusive, royalty-free license for internal use (but not to make, use, or sell products or processes for commercial purposes) to the UNIVERSITY INVENTION. This license may be extended to MIRROR MEMBERS, as defined in Section B, without additional charge, and there shall be no right to grant sublicenses under this license.
- (c) UNIVERSITY INVENTIONS shall be promptly disclosed to MEMBERS by UNIVERSITY in writing on a confidential basis. UNIVERSITY shall file for and prosecute patent applications on behalf of CONSORTIUM if patent protection is desired. UNIVERSITY shall consult with MEMBERS regarding the manner and extent of filing and prosecuting the patent and its subsequent maintenance. Each MEMBER shall have ninety (90) days from receipt of the UNIVERSITY'S invention disclosure to notify UNIVERSITY of that MEMBER'S interest in acquiring license rights beyond those provided under paragraph 3(b) and willingness to support the cost of patent filings. MEMBERS agreeing to share in the costs of patenting such inventions shall have certain rights and options as delineated in paragraphs 3(d) and 3(e) of these Bylaws. If no MEMBERS provide notice to the UNIVERSITY to acquire license rights and support patent filings within the ninety (90) day period after a UNIVERSITY INVENTION has been disclosed to MEMBERS, then the UNIVERSITY shall be free to make such UNIVERSITY INVENTION available to any company for an exclusive or nonexclusive, royalty-bearing license to make, use and sell products for commercial purposes.
- (d) MEMBERS participating in the costs of filing, prosecuting and maintaining a patent application in respect of UNIVERSITY INVENTIONS ("PARTICIPATING MEMBERS") shall have an option for a period of twelve (12) months after filing of the patent application (“OPTION PERIOD”) to acquire a royalty-bearing license to make, have made, use and sell products or processes for commercial purposes including the right to sublicense, said license to be exclusive among those PARTICIPATING MEMBERS electing to license the technology (hereinafter a "LIMITED EXCLUSIVE LICENSE"). PARTICIPATING MEMBERS may request that the LIMITED EXCLUSIVE LICENSE be offered to PARTICIPATING MEMBERS as field-exclusive licenses in fields of strategic interest to said PARTICIPATING MEMBERS. Any such request must be made unanimously in writing by the PARTICIPATING MEMBERS within six (6) months after the filing of a patent application. Any PARTICIPATING

MEMBERS that do not execute the LIMITED EXCLUSIVE LICENSE during the OPTION PERIOD shall have no further rights to the UNIVERSITY INVENTION. If one or more LIMITED EXCLUSIVE LICENSE is executed, then UNIVERSITY shall offer no additional licenses as long as such LICENSE is in effect. The cost of filing, prosecution and maintenance of patent applications shall be paid equally by the LIMITED EXCLUSIVE LICENSEES. If no LIMITED EXCLUSIVE LICENSE is granted during the OPTION PERIOD then the UNIVERSITY shall be free to make such invention available to any company for an exclusive or nonexclusive, royalty-bearing license to make, use and sell products for commercial purposes.

- (e) In the event that all LIMITED EXCLUSIVE LICENSES described in section C.1(d) terminate for a particular UNIVERSITY INVENTION, the UNIVERSITY shall be free to make such invention available to any company for an exclusive or nonexclusive, royalty-bearing, license to make, use and sell products for commercial purposes.

2. PUBLICATION POLICY

- (a) A "publication" shall be deemed to mean any written, oral or other public disclosure of research results, including the public use or sale of an invention based on the research results, if that event could bar the availability of protection in foreign jurisdictions or trigger the one-year grace period in the U.S. within which a U.S. patent application must be filed, and "publish" shall have a corresponding meaning.
- (b) UNIVERSITY shall provide each MEMBER a confidential copy of any presentation or manuscript containing results of CORE RESEARCH that it intends to disclose or publish (whether by teaching or otherwise) at least four (4) weeks prior to the time of presentation or submission to any journal or other publication, including conference abstract collections. If within such period MEMBER requests redaction of any references to or data regarding MEMBER'S intellectual property or other MEMBER confidential information within such presentation or manuscript, UNIVERSITY shall redact such references, data and confidential information prior to presentation or submission. Subject to the foregoing and Article 3: UNIVERSITY shall be free to use the results of CORE RESEARCH for its own teaching and educational purposes without payment of royalties or other fees provided that it does nothing which could bar the availability of patent protection in respect of a MEMBER'S intellectual property. UNIVERSITY is free to publish at its own discretion the results of CORE RESEARCH except those that would constitute an enabling disclosure of a MEMBER'S intellectual property on which a patent application has not been filed. In such cases, the UNIVERSITY may not publish without the prior written consent of the MEMBER concerned after having reviewed the full text proposed to be published. UNIVERSITY shall provide each MEMBER a confidential copy of any manuscript generated as a result of CORE RESEARCH at the time of submission to any journal or other publication, including conference abstract collections.

- (c) Under no circumstances will publication of a student's thesis, for which funds are derived from the CONSORTIUM, be delayed for longer than ninety (90) days after conferral of his or her degree; however, to the extent such thesis contains references to or data regarding MEMBER'S intellectual property or other MEMBER confidential information, UNIVERSITY shall provide MEMBER with a confidential copy of such thesis and MEMBER may request to (and UNIVERSITY shall) redact such references, data and confidential information prior to publication.

3. CONFIDENTIALITY POLICY

In the normal and routine operation of the CONSORTIUM as detailed in these Bylaws, there may be the need for one party to disclose information that is proprietary and confidential to the disclosing party. All such information must be disclosed by the disclosing party in writing and designated as "CONFIDENTIAL" or, if disclosed orally, must be identified as confidential at the time of disclosure and confirmed in writing as being confidential within thirty (30) days of such disclosure. Except as otherwise provided herein, for a period of five (5) years following the date of such disclosure, the receiving party agrees to use the confidential information only for purposes of this Agreement and further agrees that it will not publish or otherwise disclose such information. The restrictions of this section shall not apply to:

- (i) information which is or becomes publicly known through no fault of the receiving party;
- (ii) information learned from a third party entitled to disclose it;
- (iii) information already known to or developed by receiving party before receipt from disclosing party, as shown by receiving party's prior written records;
- (iv) information for which receiving party obtains the disclosing party's prior written permission to publish;
- (v) information required to be disclosed by court order or operation of law, including, but not limited to, the North Carolina Public Records Act; or
- (vi) information that is independently developed by the receiving party's personnel who are not privy to the disclosing party's confidential information.

The receiving party must use a reasonable degree of care to prevent the inadvertent, accidental, unauthorized or mistaken disclosure or use by its employees of confidential information disclosed hereunder.

4. SOFTWARE COPYRIGHT POLICY

Software code and associated copyrights (SOFTWARE) developed as a part of CORE RESEARCH may be reported as software disclosures to the UNIVERSITY's Office of Technology Commercialization and New Ventures. Such SOFTWARE, at the UNIVERSITY's discretion, could be made available for appropriate licensing to MEMBERS.

5. AMENDMENT POLICY

Modifications to the Bylaws can only be proposed by the Director. Any changes to these Bylaws shall be consistent with the UNIVERSITY's policies for research contracting and must be approved by two-thirds of the CONSORTIUM MEMBERS in good standing at the time the proposal for change is made. Changes to the Bylaws require approval by the UNIVERSITY before becoming final

APPENDIX A – AHNC Standard Enhancement project agreement

APPENDIX A

Animal Health and Nutrition Consortium (AHNC)

ENHANCEMENT PROJECT AGREEMENT

NCSU File _____

This Agreement is entered into by and between North Carolina State University (UNIVERSITY) and _____ (SPONSOR).

Whereas SPONSOR is a MEMBER in good standing of the Animal Health and Nutrition Consortium at UNIVERSITY and the Enhancement Project contemplated by this Agreement is of mutual interest and benefit to the UNIVERSITY and SPONSOR, and will further the instructional, research, and public service objectives of the UNIVERSITY in a manner consistent with its status as a public educational institution.

1. **Scope of Work.** The UNIVERSITY will use its best efforts to perform activities as described in its Enhancement Project entitled

_____ which is attached hereto as Appendix A and hereby made a part of this Agreement.

2. **Term.** The activities of this project shall be conducted during the period beginning _____ through _____ subject to SPONSOR'S "member-in-good-standing" status with AHNC.

3. **Payment.** SPONSOR agrees to support the UNIVERSITY's costs incurred conducting the activities as stated in Appendix A, in the amount of \$ _____. This amount shall not be exceeded by the UNIVERSITY without the written authorization of the SPONSOR. Payment shall be made upon receipt of the UNIVERSITY's invoice in accordance with the following schedule:

fifty (50) % of the total costs upon execution of this Agreement

fifty (50) % upon submission to the SPONSOR of the Final Technical Report due in thirty (30) days after the end date of the project.

[these are the typical payment terms though they may be changed based on the mutual agreement]

UNIVERSITY shall send SPONSOR invoices to the following individual using the contact information provided below:

Company Name _____

ATTN: First and Last Name _____

Street Address: _____

City _____ State _____ Zip Code _____

Phone: _____

Email: _____

For payment by check, the UNIVERSITY's remittance address is shown below. For payment by electronic funds transfer or financial questions, please contact a Contracts & Grants Authorized Representative using the contact information provided below.

North Carolina State University
Office of Contracts and Grants
2701 Sullivan Drive, Suite 240
Campus Box 7214
Raleigh, NC 27695-7214
United States of America

Phone: 919-515-2153

Email: cnghelpdesk@ncsu.edu

- 4. Termination.** Performance under this Agreement may be terminated by SPONSOR at any time upon 60 days written notice to UNIVERSITY. Upon receipt of notification, UNIVERSITY must proceed in an orderly fashion to limit or terminate any outstanding commitments and/or to conclude the project. UNIVERSITY must be reimbursed by SPONSOR for all costs and non-cancelable commitments incurred in performance of the work prior to receipt of termination notice pro-rated based on the SPONSOR's portion of the total costs. UNIVERSITY may terminate performance if circumstances

beyond its control preclude the continuation of the Research. If UNIVERSITY terminates, UNIVERSITY must reimburse SPONSOR all unexpended funds pro-rated based on the SPONSOR's portion of the total costs, except for those funds needed to pay for non-cancelable commitments.

5. **Remaining Funds.** Any residual funds left upon completion of an enhancement project will be transferred back into a pool membership dues account.
6. **Controlling Terms and Conditions.** The terms and conditions set forth in the AHNC Membership Agreement and Bylaws shall govern this project.

In witness whereof, the parties hereto have executed this Agreement effective as of the last hereinafter written.

SPONSOR

UNIVERSITY

By: _____

By: _____

Title: _____

Title: _____

Date: _____

Date: _____