MEMORANDUM OF AGREEMENT

BETWEEN

THE DEFENSE HEALTH AGENCY (DHA)

AND

THE [SECOND PARTY (AND ACRONYM)]

FOR

FORECASTING COVID-19 AND OTHER MILITARY RELEVANT DISEASES IN THE DOD

AGREEMENT NUMBER

This is a new memorandum of agreement (MOA) between the DHA and the [Second Party][if the Second Party is a non-governmental entity, include its address]. When referred to collectively, the DHA and the [Second Party] are referred to as the “Parties.”

1. BACKGROUND: The data will be used to inform development of an operational forecasting model for COVID-19 and other military relevant diseases. The purpose of the agreement is to facilitate sharing of data with additional academic institutions for developing forecasting models. The results of each model will be evaluated individually and then combined to generate one combined (ensemble) model.

Although it is well known that the impact, severity, and timing of COVID-19 and influenza epidemics vary substantially from year to year, the mechanism driving inter-annual fluctuations in disease dynamics are not well understood. In parallel, there is much interest in designing forecasting models of COVID-19 and influenza and epidemic size to inform prevention control strategies and optimize hospital and emergency systems that operate close to surge capacity, particularly in winter. This capability will also inform senior leaders during the emergence of a novel disease, such as COVID-19.

Participants in the challenge will use DHA medical encounter and laboratory data to study the trajectory of disease transmission. The DHA datasets will be regressed against other relevant datasets to obtain spatially resolved indicators of disease activity at the MHS market level.

The objective of this project is to develop and operationalize forecasts including, but not limited to, four-week ahead percent COVID-like illness (CLI). In addition to receiving the weekly forecasts from component models, the DHA AFHSD seeks to generate a combined (ensemble) forecasting model.

2. AUTHORITIES:

2.1. Department of Defense (DoD) Instruction 4000.19, “Support Agreements,” April 25, 2013; Incorporating Updates, December 16, 2020.

2.2. DoDD 5136.13, “Defense Health Agency (DHA),” September 30, 2013

3. PURPOSE AND SCOPE: To partner with academia, industry, and interagency to develop and operationalize forecasting models for producing weekly accurate, probabilistic forecasts for each MHS market. The forecast results will be submitted to AFHSD via email or to a web interface, similar to the Centers for Disease Control and Prevention (CDC) Flu Challenge. The forecasts will then be displayed online and/or in electronic reports for DoD decision makers.

4. RESPONSIBILITIES OF THE PARTIES:

4.1. The DHA will—

4.1.1. Query the Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE) to identify encounters that meet the inclusion criteria. For all those selected, the data will be extracted, and then restricted to diagnostic and laboratory test results.

4.1.2. Generate a de-identified and aggregated data set using the Safe-Harbor method; no identifiers are used for these data.

4.1.3. Deliver the data to the [second party] via web interface.

4.1.4. Store data on a web interface and an AFHSD secure server.

4.1.5. Each week, use appropriate procedures for measuring the accuracy of each forecasting approach, and assess the performance of a combined (ensemble) approach.

4.2. The [Second Party] will—

4.2.1. Apply various forecasting methodologies independently, using a common dataset for building and testing models.

4.2.2. Generate probabilistic forecasts for each MHS market per week; which will include, at a minimum, seasonal targets of four-week ahead CLI percentage.

4.2.3. Submit the weekly forecast results to DHA via web interface or email.

4.2.4. Gain approval from DHA for any manuscripts utilizing DoD data shared through this agreement.

5. PERSONNEL: Each Party is responsible for all costs of its personnel, including pay and benefits, support, and travel, as well as for supervision and management of its personnel.

6. GENERAL PROVISIONS:

6.1. POINTS OF CONTACT: The following points of contact (POC) shall be used by the

Parties to communicate in the implementation of this MOA. Each Party may change its POC upon reasonable notice to the other Party.

6.1.1. For the DHA—

6.1.1.1. Juan Ubiera, Integrated Biosurveillance Chief, 301-319-3241

6.1.1.2. Dr. Jamaal Russell, Epidemiologist, Integrated Biosurveillance, 301-319-2227

6.1.2. For the [second party]

6.1.2.1. Name, position, and phone number of Primary POC: 6.1.2.2. Name, position, and phone number of Alternate POC:

6.2. CORRESPONDENCE. All correspondence to be sent and notices to be given pursuant to this MOA shall be addressed, if to the DHA, to—

6.2.1. 7700 Arlington Boulevard, #5101

Falls Church, Virginia 22042

and, if to the [second party], to—

6.2.2. [insert mailing address]

or as may from time to time otherwise be directed by the Parties.

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. If reimbursable, this MOA will be reviewed on or around the anniversary of its effective date annually for financial impacts; if there are substantial changes in resource requirements, the agreement will be reviewed 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 law, Executive Order, or DoD issuance, be resolved by consultation between the Parties.

6.6. TERMINATION OF AGREEMENT. This MOA may be terminated by either Party by giving at least 180 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 on 1 September 2026.

6.12. 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.

6.13. 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 law.

6.14. OTHER FEDERAL AGENCIES. This MOA does not bind any federal agency, other than the Parties, nor waive required compliance with any law or regulation.

7. LIST OF ATTACHMENTS:

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

For the DHA— For [Second Party]—

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Michael P. Malanoski, M.D., SES J. G. Doe, RADM, USN

Deputy Director Vice Director

Defense Health Agency ACME

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(Date) (Date)

Mid-Point Review Due Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ [Enter date mid-point review due] Mid-Point Review completed by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature and Name of Reviewer