



August 19, 2022

Drs. Aleksei Chmura and Peter Daszak
EcoHealth Alliance, Inc.
460 W 34th St.
Suite 1701
New York, NY 10001

Re: R01AI110964

Dear Drs. Chmura and Daszak:

Thank you for your response dated, January 21, 2022, and all of your prior correspondence on the above-mentioned grant. In am writing to inform you that the National Institutes of Health (NIH) is taking the following actions with respect to grant R01AI110964, as more fully described in this letter:

- (1) NIH is terminating the subaward from EcoHealth Alliance (EHA) to the Wuhan Institute of Virology (WIV) due to material non-compliance with terms and conditions of award that cannot be remedied by specific award conditions. This will be accomplished as a partial termination of the award to EHA under 45 CFR 75.371(c).
- (2) NIAID will work with EHA to explore renegotiating the remainder of the award to proceed without involvement from WIV, if the award can be renegotiated without representing a significant scientific departure from the original, peer reviewed project. If the award is not able to be renegotiated without such a departure, then NIH will request a bilateral termination, and EHA may submit a new competitive (Type 1) application for funding of the revised project.
- (3) If the remaining award can be renegotiated successfully, then NIAID will issue a revised award, subject to specific award conditions outlined below, which include that EHA must conduct or arrange for the conduct of onsite subrecipient facility inspections every 6 months to ensure that subaward activities are being properly executed.

Termination in Part

In my previous correspondence, dated November 5, 2021, and again on January 6, 2022, NIH requested from EHA complete and dated copies of the original laboratory notebook entries and of the original electronic files from the Wuhan Institute of Virology (WIV), that led to the generation of the Year 4 RPPR Figure 35 and the Year 5 I-RPPR Figure 13, along with all their accompanying texts (e.g., the Year 5 I-RPPR text in in which you stated that “rWIV1-SHC014 was detected at all time points and showed an increasing viral titer after infection...”). You responded that EHA relayed the request to WIV, but that EHA has not received a response from WIV and will inform NIH once the response is received. To date, NIH has not received the requested items.

We have also examined the subaward agreement from EHA to WIV, and we found that the agreement did not include “a requirement that the subrecipient [WIV] permit the pass-through entity [EHA] and auditors to have access to the subrecipient's records and financial statements as necessary for the pass-through

entity to meet the requirements of this part” as required under 45 C.F.R. 75.352. The agreement also did not include “all requirements imposed by the pass-through entity on the subrecipient so that the Federal award is used in accordance with Federal statutes, regulations and the terms and conditions of the Federal award[.]” 45 CFR 75.352. One such term and condition is that “The HHS awarding agency, Inspectors General, the Comptroller General of the United States, and the pass-through entity, or any of their authorized representatives, must have the right of access to any documents, papers, or other records of the non-Federal entity which are pertinent to the Federal award, in order to make audits, examinations, excerpts, and transcripts.” 45 CFR 75.364. The terms and conditions of Federal awards, including 45 CFR 75.364, flow down to subawards to subrecipients. 45 CFR 75.101(b). The subaward agreement to WIV did not indicate that the NIH, Inspectors General, the Comptroller General of the United States, and the pass-through entity (EHA), or any of their authorized representatives, must have the right of access to any documents, papers, or other records of the non-Federal entity (WIV) which are pertinent to the Federal award, in order to make audits, examinations, excerpts, and transcripts.

As provided under 45 CFR 75.371, “If a non-Federal entity fails to comply with Federal statutes, regulations, or the terms and conditions of a Federal award, the HHS awarding agency or pass-through entity may impose additional conditions, as described in § 75.207. If the HHS awarding agency or pass-through entity determines that noncompliance cannot be remedied by imposing additional conditions, the HHS awarding agency or pass-through entity may take one or more [enforcement] actions, as appropriate in the circumstances[.]” 45 CFR 75.371. Such actions may include partly terminating the Federal award. Id. at 75.371(c).

NIH has determined that WIV’s refusal to provide the requested records, and EHA’s failure to include the required terms in WIV’s subaward agreement represent material failures to comply with the terms of award. NIH has further determined that in these circumstances, WIV’s refusal to provide records cannot be remedied by imposing additional conditions, and that a partial termination of award (i.e., termination of the subaward to WIV) is the only appropriate action.

Renegotiation of Award

As a result of NIH’s termination of the subaward to WIV, we ask that EHA outline, within 30 days of this letter, how EHA will accomplish the purpose of the grant that was originally awarded without the subaward arrangement with WIV. This will require EHA to provide us with a change in scope outlining how the scope of the work will be modified to save the overall project while removing that portion of the research that was supported by WIV. Any change of scope, however, may not represent a significant scientific departure from the original peer reviewed project. If the change represents a significant departure from the original peer reviewed project, then NIH will request a bilateral termination of the remaining award, and EHA may submit a new competitive (Type 1) application for funding of the revised project. NIAID will work directly with EHA on such negotiations, including in reviewing EHA’s proposal and discussing any needed scientific and budgetary adjustments.

Specific Award Conditions

If the remaining award is able to be renegotiated successfully, then the revised award will be subject to specific award conditions pursuant to 45 CFR 75.371 and 45 CFR 75.207. As provided under 45 CFR 75.371, “If a non-Federal entity fails to comply with Federal statutes, regulations, or the terms and conditions of a Federal award, the HHS awarding agency or pass-through entity may impose additional conditions, as described in § 75.207.”

NIH will be imposing these specific award conditions, because NIH has determined that for grant R01AI110964, apart from the WIV-related non-compliance noted above, EHA failed to comply with

requirements for the timely submission of financial and Research Performance Progress Reports (RPPR), and compliance other monitoring requirements. Additionally, EHA’s subaward agreements for the R01AI110964 grant did not contain required components, as outlined in 45 C.F.R. § 75.352 and the [NIH GPS 15.2.1](#), and were out of compliance. Specifically:

| Written Agreement Requirements | Compliance - Status |
|--|--|
| All requirements imposed by the pass-through entity on the subrecipient so that the Federal award is used in accordance with Federal statutes, regulations and the terms and conditions of the Federal award. (“The terms and conditions of Federal-awards (including [45 CFR 75]) flow down to subawards to subrecipients” 45 CFR 75.101(b)) | Non-compliant: Not provided. |
| Any additional requirements that the pass-through entity imposes on the subrecipient in order for the pass-through entity to meet its own responsibility to the HHS awarding agency including identification of any required financial and performance reports. | Non-compliant: The agreements lacked clear requirements for when financial and performance reports are due, and what must be included in them. In addition, the recipient failed to submit the reports, when requested. |
| A requirement that the subrecipient permit EcoHealth and auditors to have access to the subrecipient's records and financial statements as necessary for EcoHealth to meet the requirements under 45 CFR part 75. | Non-compliant: Not provided. |
| Procedures for directing and monitoring the research effort. | Non-compliant: Not provided. |
| If the subrecipient's Investigators must comply with the subrecipient's Financial Conflict of Interest policy, the subrecipient shall certify as part of the written agreement that its policy complies with the 2011 revised FCOI regulation (42 CFR 50 Subpart F). If the subrecipient cannot provide such certification, the agreement shall state that the subrecipient’s Investigators are subject to the Financial Conflict of Interest policy of the awardee Institution for disclosing Significant Financial Interests that are directly related to the subrecipient's work for the awardee Institution. | Non-compliant: Subrecipient FCOI policy not provided, nor was there a certification as part of the written agreement demonstrating compliance with the 2011 revised FCOI regulation (42 CFR 50 Subpart F). |
| A provision addressing ownership and disposition of data produced under the consortium agreement. This includes whether cell lines, samples or other resources will be freely available to other investigators in the scientific community or will be provided to particular investigators only. | Non-compliant: Not provided. |
| A provision making the NIH data sharing and inventions and patent policy, including a requirement to report inventions to the recipient (see Administrative Requirements-Availability of | Non-compliant: Not provided. |

| | |
|---|---|
| <p>Research Results: Publications, Intellectual Property Rights, and Sharing Research Resources), applicable to each consortium participant and its employees in order to ensure that the rights of the parties to the consortium agreement are protected and that the recipient can fulfill its responsibilities to NIH.</p> | |
| <p>Incorporation of applicable public policy requirements and provisions indicating the intent of each consortium participant to comply, including submission of applicable assurances and certifications (see Public Policy Requirements, Objectives, and Other Appropriation Mandates).</p> | <p>Non-compliant: The agreement does not incorporate applicable public policy requirements.</p> |

NIH further identified that EHA did not charge the correct Facilities and Administrative (F&A) rate of 8 percent (see [NIH GPS 16.6](#)) to the foreign subawards under R01AI110964.

NIH has determined that in these circumstances, these violations can be remedied by imposing additional conditions. 45 CFR 75.371. Accordingly, if the remaining award is able to be renegotiated successfully, then the revised award will include the following specific award conditions:

- (1) EHA must conduct or arrange for the conduct of onsite subrecipient facility inspections every 6 months to ensure that subaward activities are being properly executed.
- (2) EHA must provide NIH with copies of updated subaward agreements for R01AI110964 that correct the deficiencies noted in the table above and demonstrate compliance with the NIH GPS [15.2.1 Written Agreement](#). The subaward agreements must state the correct F&A rate which, for foreign subrecipients is 8% (see NIH GPS [16.6](#)).
- (3) The expanded authority for automatic no-cost extensions will be withdrawn. This will require that EHA request and receive written prior approval from NIAID before any extensions of the final budget period.
- (4) Automatic carryover authorities will be withdrawn. This will require EHA to request and receive written approval to carry over any unobligated balances on all awards prior carrying over unobligated balances from one budget period to any subsequent budget period.
- (5) EHA is required to submit semi-annual RPPRs and Federal Financial Reports to NIAID.
- (6) Provide NIAID with copies of FSRS reporting for all subawards issued under the revised R01AI119064.

These specific award conditions will be in place for a period of at least 3 years from the date of the revised Notice of Award with an annual review to ensure proper compliance.

This letter represents the final decision of the Chief Grants Management Officer, NIAID, NIH. However, the NIH reserves the right to take additional compliance actions as needed, such as disallowing funds or imposing additional specific award conditions, if the HHS Office of Inspector General identifies other noncompliance and/or recommends such actions as a result of its audit of EcoHealth.

I note that the partial termination (i.e., termination of the subaward) is appealable. Accordingly, the partial termination shall be final and in effect unless within 30 days after receiving this decision, you deliver a written notice of appeal of the partial termination to:

Michelle G. Bulls
NIH Grant Appeals Officer
National Institutes of Health
(b) (6)
6705 Rockledge Drive, Room 3534/MSC 7963
Bethesda, MD 20892-7963

Please include a copy of this decision, your appeal justification, and any material or documentation that will support your position. Finally, the appeal must be signed by the institutional official authorized to sign award applications and must be postmarked no later than 30 days after the postmarked date of this notice.

Please let me know if you have any questions concerning the information in this letter.

Sincerely,

Michael S. Lauer -S

Digitally signed by Michael S.
Lauer -S
Date: 2022.08.19 13:32:40 -04'00'

Michael S Lauer, MD
NIH Deputy Director for Extramural Research
(b) (6)

FFATA Report For Grants

Federal Award Identifier Number (FAIN): U01AI153420

Federal Agency ID: 7529

Is this information correct?: Yes

Federal Agency Name: NATIONAL INSTITUTES OF HEALTH

Prime Awardee DUNS #:077090066

Is this information correct?: Yes

DUNS Number +4:

Prime Awardee Name:ECOHEALTH ALLIANCE INC.

Prime Awardee Address:520 8TH AVE RM 1200 NEW YORK, New York 100184183

Prime Awardee Parent DUNS #: 077090066

Principal Place Of Performance(POP): NEW YORK, New York 100186507

CFDA Program Number(s): 93.855 Allergy and Infectious Diseases Research

Is this information correct?: Yes

Project Description: Study of Nipah virus dynamics and genetics in its bat reservoir and of human exposure to NiV across Bangladesh to understand patterns of human outbreaks

Is this information correct?: Yes

Total Federal Funding Amount: 580858.00

Is this information correct?: Yes

Obligation/Action Date:September 15, 2020

Is this information correct?: Yes

Report Month:Dec 2020

In your business or organization's preceding completed fiscal year, did your business or organization (the legal entity to which this specific SAM record, represented by a DUNS number, belongs) receive (1) 80 percent or more of your annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$25,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements? Yes

Does the public have access to information about the compensation of the executives in your business or organization (the legal entity to which this specific SAM record, represented by a DUNS number, belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986? Yes

Subawardee Data

Table with 2 columns: Subawardee Information and Data. Rows include Subawardee DUNS (731531765), Subawardee Name (INSTITUTE OF EPIDEMIOLOGY, DISEASE CONTROL AND RESEARCH), Subawardee Address (MOHAKHALI DHAKA, Non-US), Subawardee Parent DUNS (731504841), Amount of Subaward (33424.66), Subaward Obligation/Action Date (December 31, 2020), CFDA Program Number(s) (93.855 Allergy and Infectious Diseases Research), Federal Agency ID (7529), and Federal Agency Name (NATIONAL INSTITUTES OF HEALTH).

Subaward Project Description:

â€¢ Coordinate human data collection and analysis as described under the specific aims of the project proposal in partnership with EHA
â€¢ Coordinate Nipah outbreak investigations with EHA team, which will be responsible for animal and environmental investigations including but not limited to, the collection of bat samples (primarily roost urine samples) from bat colonies proximal to the suspected index case (within 5 km of the index case village). The IEDCR Director will communicate with EHA Bangladesh coordinator to initiate outbreak investigation activities and the coordinator will communicate activities and findings with the IEDCR director

Subawardee Principal Place of Performance:

Dhaka, Non-US

Subaward Number:

1U01AI153420-01

As provided to you by your subawardee, in your subawardee's business or organization's preceding completed fiscal year, did its business or organization (the legal entity to which the DUNS number it provided belongs) receive (1) 80 percent or more of its annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$25,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?:

No

As provided to you by your subawardee, does the public have access to information about the compensation of the executives in the subawardee's business or organization (the legal entity to which the DUNS number it provided belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?:

No

FFATA Report For Grants

Federal Award Identifier Number (FAIN): U01AI153420

Federal Agency ID: 7529

Is this information correct?: Yes

Federal Agency Name: NATIONAL INSTITUTES OF HEALTH

Prime Awardee DUNS #:077090066

Is this information correct?: Yes

DUNS Number +4:

Prime Awardee Name:ECOHEALTH ALLIANCE INC.

Prime Awardee Address:520 8TH AVE RM 1200
NEW YORK, New York
100184183

Prime Awardee Parent DUNS #: 077090066

Principal Place Of Performance(POP): NEW YORK, New York
100012320

CFDA Program Number(s): 93.855 Allergy and Infectious Diseases Research

Is this information correct?: Yes

Project Description:- Project Summary Nipah virus is a zoonotic paramyxovirus, carried by old world fruit bats across Africa and Asia, which causes severe, fatal encephalitis in humans and can be transmitted from person to person. In Bangladesh, where outbreaks in people occur annually, the primary route of transmission is the consumption of raw date palm sap. Date palm sap is harvested and consumed most intensively in western Bangladesh, an area referred to as the "Nipah belt," however, date palm sap consumption, NiV, and its bat reservoir, Pteropus medius, are present throughout Bangladesh. It is unclear why outbreaks have not been detected in eastern Bangladesh. Cryptic spillover of NiV creates a significant risk that more pathogenic and transmissible strains will emerge and lead to large epidemics. This multidisciplinary project will determine whether NiV outbreaks have occurred in eastern Bangladesh and how differences in human behavior, infection patterns in bats, and genetic variation in circulating strains of NiV influence outbreaks outside of the Nipah belt. This project combines human exposure studies with multi-site longitudinal infection studies in bats and in vivo experimental infections in bats and hamsters comparing clinical outcomes among diverse strains to achieve the following specific aims: 1) To compare NiV exposure and its behavioral determinants among human populations inside and outside the Nipah belt in Bangladesh. We will test the hypothesis that NiV spillover has occurred in Bangladesh in communities outside the Nipah belt. We will use behavioral questionnaires and a multiplex Luminex serological assay to screen high risk populations for IgG antibodies against NiV and determine if Nipah exposure has occurred and how behavioral risk varies by locality. 2) To compare Nipah virus temporal dynamics in Pteropus bat colonies inside and outside of the Nipah belt. We will conduct longitudinal bat NiV field studies in six locations (3 western, 3 eastern), characterize local bat demography, measure changes in seroprevalence over time; determine viral shedding patterns and genetic variation among strains. Through experimental bat infections in a BSL 4 lab, we will determine whether bats with antibodies against NiV (previous exposure) may be re-infected and shed virus. This will answer a critical question about transmission dynamics and allow us to test the hypothesis that viral shedding occurs with different frequency in eastern bats compared to western bats, which may influence zoonotic transmission. 3) To compare pathogenicity and transmissibility of diverse Nipah virus isolates from bats inside and outside the Nipah belt, using animal models. Malaysia type NiV and Bangladesh type have different clinical profiles in people. NiV genetic variation may account for lower human infection rates in eastern Bangladesh. To test this hypothesis, we will compare transmissibility and pathogenicity of diverse NiV strains isolated from Pteropus medius in a Syrian hamster model under BSL 4 conditions.

Is this information correct?: Yes

Total Federal Funding Amount: 1155842.00

Is this information correct?: Yes

Obligation/Action Date:September 15, 2020

Is this information correct?: Yes

Report Month:Mar 2021

In your business or organization's preceding completed fiscal year, did your business or organization (the legal entity to which this specific SAM record, represented by a DUNS number, belongs) receive (1) 80 percent or more of your annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$25,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements? Yes

Does the public have access to information about the compensation of the executives in your business or organization (the legal entity to which this specific SAM record, represented by a DUNS number, belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986? Yes

Subawardee Data

Subawardee Information: Subawardee DUNS:

731531765

INSTITUTE OF EPIDEMIOLOGY, DISEASE CONTROL

Subawardee Name:

Subawardee Address:

Subawardee Parent DUNS:

Amount of Subaward:

Subaward Obligation/Action Date:

CFDA Program Number(s):

Federal Agency ID:

Federal Agency Name:

AND RESEARCH

MOHAKHALI

DHAKA, Non-US

731504841

54040.35

March 31, 2021

93.855 Allergy and Infectious Diseases Research

7529

NATIONAL INSTITUTES OF HEALTH

â€¢ Coordinate human data collection and analysis as described under the specific aims of the project proposal in partnership with EHA
â€¢ Coordinate Nipah outbreak investigations with EHA team, which will be responsible for animal and environmental investigations including but not limited to, the collection of bat samples (primarily roost urine samples) from bat colonies proximal to the suspected index case (within 5 km of the index case village). The IEDCR Director will communicate with EHA Bangladesh coordinator to initiate outbreak investigation activities and the coordinator will communicate activities and findings with the IEDCR director

Subaward Project Description:

Subawardee Principal Place of Performance:

Subaward Number:

Dhaka, Non-US

1U01AI153420-01

As provided to you by your subawardee, in your subawardee's business or organization's preceding completed fiscal year, did its business or organization (the legal entity to which the DUNS number it provided belongs) receive (1) 80 percent or more of its annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$30,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?:

No

As provided to you by your subawardee, does the public have access to information about the compensation of the executives in the subawardee's business or organization (the legal entity to which the DUNS number it provided belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?:

No

FFATA Report For Grants

Federal Award Identifier Number (FAIN): U01AI153420

Federal Agency ID: 7529

Is this information correct?: Yes

Federal Agency Name: NATIONAL INSTITUTES OF HEALTH

Prime Awardee DUNS #:077090066

Is this information correct?: Yes

DUNS Number +4:

Prime Awardee Name:ECOHEALTH ALLIANCE INC.

Prime Awardee Address:520 8TH AVE RM 1200
NEW YORK, New York
100184183

Prime Awardee Parent DUNS #: 077090066

Principal Place Of Performance(POP): NEW YORK, New York
100012320

CFDA Program Number(s): 93.855 Allergy and Infectious Diseases Research

Is this information correct?: Yes

Project Description:- Study of Nipah virus dynamics and genetics in its bat reservoir and of human exposure to NiV across Bangladesh to understand patterns of human outbreaks. Project Summary Nipah virus is a zoonotic paramyxovirus, carried by old world fruit bats across Africa and Asia, which causes severe, fatal encephalitis in humans and can be transmitted from person to person. In Bangladesh, where outbreaks in people occur annually, the primary route of transmission is the consumption of raw date palm sap. Date palm sap is harvested and consumed most intensively in western Bangladesh, an area referred to as the "Nipah belt," however, date palm sap consumption, NiV, and its bat reservoir, Pteropus medius, are present throughout Bangladesh. It is unclear why outbreaks have not been detected in eastern Bangladesh. Cryptic spillover of NiV creates a significant risk that more pathogenic and transmissible strains will emerge and lead to large epidemics. This multidisciplinary project will determine whether NiV outbreaks have occurred in eastern Bangladesh and how differences in human behavior, infection patterns in bats, and genetic variation in circulating strains of NiV influence outbreaks outside of the Nipah belt. This project combines human exposure studies with multi-site longitudinal infection studies in bats and in vivo experimental infections in bats and hamsters comparing clinical outcomes among diverse strains to achieve the following specific aims: 1) To compare NiV exposure and its behavioral determinants among human populations inside and outside the Nipah belt in Bangladesh. We will test the hypothesis that NiV spillover has occurred in Bangladesh in communities outside the Nipah belt. We will use behavioral questionnaires and a multiplex Luminex serological assay to screen high risk populations for IgG antibodies against NiV and determine if Nipah exposure has occurred and how behavioral risk varies by locality. 2) To compare Nipah virus temporal dynamics in Pteropus bat colonies inside and outside of the Nipah belt. We will conduct longitudinal bat NiV field studies in six locations (3 western, 3 eastern), characterize local bat demography, measure changes in seroprevalence over time; determine viral shedding patterns and genetic variation among strains. Through experimental bat infections in a BSL 4 lab, we will determine whether bats with antibodies against NiV (previous exposure) may be re-infected and shed virus. This will answer a critical question about transmission dynamics and allow us to test the hypothesis that viral shedding occurs with different frequency in eastern bats compared to western bats, which may influence zoonotic transmission. 3) To compare pathogenicity and transmissibility of diverse Nipah virus isolates from bats inside and outside the Nipah belt, using animal models. Malaysia type NiV and Bangladesh type have different clinical profiles in people. NiV genetic variation may account for lower human infection rates in eastern Bangladesh. To test this hypothesis, we will compare transmissibility and pathogenicity of diverse NiV strains isolated from Pteropus medius in a Syrian hamster model under BSL 4 conditions.

Is this information correct?: Yes

Total Federal Funding Amount: 1155842.00

Is this information correct?: Yes

Obligation/Action Date:September 15, 2020

Is this information correct?: Yes

Report Month:Jun 2021

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Does the public have access to information about the compensation of the executives in your business or organization (the legal entity to which this specific SAM record, represented by a DUNS number, belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?: Yes

Subawardee Data

Subawardee Information: Subawardee DUNS:

731531765
INSTITUTE OF EPIDEMIOLOGY, DISEASE CONTROL

Subawardee Name:

Subawardee Address:

Subawardee Parent DUNS:

Amount of Subaward:

Subaward Obligation/Action Date:

CFDA Program Number(s):

Federal Agency ID:

Federal Agency Name:

AND RESEARCH

MOHAKHALI

DHAKA, Non-US

731504841

86720.95

June 30, 2021

93.855 Allergy and Infectious Diseases Research

7529

NATIONAL INSTITUTES OF HEALTH

â€¢ Coordinate human data collection and analysis as described under the specific aims of the project proposal in partnership with EHA
â€¢ Coordinate Nipah outbreak investigations with EHA team, which will be responsible for animal and environmental investigations including but not limited to, the collection of bat samples (primarily roost urine samples) from bat colonies proximal to the suspected index case (within 5 km of the index case village). The IEDCR Director will communicate with EHA Bangladesh coordinator to initiate outbreak investigation activities and the coordinator will communicate activities and findings with the IEDCR director

Subaward Project Description:

Subawardee Principal Place of Performance:

Subaward Number:

Dhaka, Non-US

1U01AI153420-01

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As provided to you by your subawardee, does the public have access to information about the compensation of the executives in the subawardee's business or organization (the legal entity to which the DUNS number it provided belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?:

No

FFATA Report For Grants

Federal Award Identifier Number (FAIN): U01AI153420

Federal Agency ID: 7529

Is this information correct?: Yes

Federal Agency Name: NATIONAL INSTITUTES OF HEALTH

Prime Awardee DUNS #:077090066

Is this information correct?: Yes

DUNS Number +4:

Prime Awardee Name:ECOHEALTH ALLIANCE INC.

Prime Awardee Address:520 8TH AVE RM 1200
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Prime Awardee Parent DUNS #: 077090066

Principal Place Of Performance(POP): NEW YORK, New York
100012320

CFDA Program Number(s): 93.855 Allergy and Infectious Diseases Research

Is this information correct?: Yes

Project Description:- Study of Nipah virus dynamics and genetics in its bat reservoir and of human exposure to NiV across Bangladesh to understand patterns of human outbreaks. Project Summary Nipah virus is a zoonotic paramyxovirus, carried by old world fruit bats across Africa and Asia, which causes severe, fatal encephalitis in humans and can be transmitted from person to person. In Bangladesh, where outbreaks in people occur annually, the primary route of transmission is the consumption of raw date palm sap. Date palm sap is harvested and consumed most intensively in western Bangladesh, an area referred to as the "Nipah belt," however, date palm sap consumption, NiV, and its bat reservoir, Pteropus medius, are present throughout Bangladesh. It is unclear why outbreaks have not been detected in eastern Bangladesh. Cryptic spillover of NiV creates a significant risk that more pathogenic and transmissible strains will emerge and lead to large epidemics. This multidisciplinary project will determine whether NiV outbreaks have occurred in eastern Bangladesh and how differences in human behavior, infection patterns in bats, and genetic variation in circulating strains of NiV influence outbreaks outside of the Nipah belt. This project combines human exposure studies with multi-site longitudinal infection studies in bats and in vivo experimental infections in bats and hamsters comparing clinical outcomes among diverse strains to achieve the following specific aims: 1) To compare NiV exposure and its behavioral determinants among human populations inside and outside the Nipah belt in Bangladesh. We will test the hypothesis that NiV spillover has occurred in Bangladesh in communities outside the Nipah belt. We will use behavioral questionnaires and a multiplex Luminex serological assay to screen high risk populations for IgG antibodies against NiV and determine if Nipah exposure has occurred and how behavioral risk varies by locality. 2) To compare Nipah virus temporal dynamics in Pteropus bat colonies inside and outside of the Nipah belt. We will conduct longitudinal bat NiV field studies in six locations (3 western, 3 eastern), characterize local bat demography, measure changes in seroprevalence over time; determine viral shedding patterns and genetic variation among strains. Through experimental bat infections in a BSL 4 lab, we will determine whether bats with antibodies against NiV (previous exposure) may be re-infected and shed virus. This will answer a critical question about transmission dynamics and allow us to test the hypothesis that viral shedding occurs with different frequency in eastern bats compared to western bats, which may influence zoonotic transmission. 3) To compare pathogenicity and transmissibility of diverse Nipah virus isolates from bats inside and outside the Nipah belt, using animal models. Malaysia type NiV and Bangladesh type have different clinical profiles in people. NiV genetic variation may account for lower human infection rates in eastern Bangladesh. To test this hypothesis, we will compare transmissibility and pathogenicity of diverse NiV strains isolated from Pteropus medius in a Syrian hamster model under BSL 4 conditions.

Is this information correct?: Yes

Total Federal Funding Amount: 1155842.00

Is this information correct?: Yes

Obligation/Action Date:September 15, 2020

Is this information correct?: Yes

Report Month:Jun 2021

In your business or organization's preceding completed fiscal year, did your business or organization (the legal entity to which this specific SAM record, represented by a DUNS number, belongs) receive (1) 80 percent or more of your annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$25,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?: Yes

Does the public have access to information about the compensation of the executives in your business or organization (the legal entity to which this specific SAM record, represented by a DUNS number, belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?: Yes

Subawardee Data

Subawardee Information: Subawardee DUNS:

731531765
INSTITUTE OF EPIDEMIOLOGY, DISEASE CONTROL

| | |
|---|---|
| Subawardee Name: | AND RESEARCH |
| Subawardee Address: | MOHAKHALI DHAKA, Non-US |
| Subawardee Parent DUNS: | 731504841 |
| Amount of Subaward: | 86720.95 |
| Subaward Obligation/Action Date: | June 30, 2021 |
| CFDA Program Number(s): | 93.855 Allergy and Infectious Diseases Research |
| Federal Agency ID: | 7529 |
| Federal Agency Name: | NATIONAL INSTITUTES OF HEALTH |
| | â€¢ Coordinate human data collection and analysis as described under the specific aims of the project proposal in partnership with EHA |
| | â€¢ Coordinate Nipah outbreak investigations with EHA team, which will be responsible for animal and environmental investigations including but not limited to, the collection of bat samples (primarily roost urine samples) from bat colonies proximal to the suspected index case (within 5 km of the index case village). The IEDCR Director will communicate with EHA Bangladesh coordinator to initiate outbreak investigation activities and the coordinator will communicate activities and findings with the IEDCR director |
| Subaward Project Description: | |
| Subawardee Principal Place of Performance: | Dhaka, Non-US |
| Subaward Number: | 1U01AI153420-01 |
| As provided to you by your subawardee, in your subawardee's business or organization's preceding completed fiscal year, did its business or organization (the legal entity to which the DUNS number it provided belongs) receive (1) 80 percent or more of its annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$30,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?: | No |
| As provided to you by your subawardee, does the public have access to information about the compensation of the executives in the subawardee's business or organization (the legal entity to which the DUNS number it provided belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?: | No |
| Subawardee DUNS: | 731524711 |
| Subawardee Name: | INTERNATIONAL CENTRE FOR DIARRHOEAL DISEASE RESEARCH, BANGLADESH |
| Subawardee Doing Business As Name: | ICDDR, B |
| Subawardee Address: | 68, SHAHEED TAJUDDIN AHMED SARANI MOHAKHALI DHAKA, Non-US |
| Amount of Subaward: | 61852.95 |
| Subaward Obligation/Action Date: | June 30, 2021 |
| CFDA Program Number(s): | 93.855 Allergy and Infectious Diseases Research |
| Federal Agency ID: | 7529 |
| Federal Agency Name: | NATIONAL INSTITUTES OF HEALTH |
| | Icddr,b will screen all bat and human samples collected under this project, according to an agreed upon sampling plan. Bat and human sera will be tested for henipavirus antibodies using the Luminex platform. Urine, fecal or oropharyngeal samples collected from bats will be tested using a real time PCR assay which targets the N gene region of NIV, and a consensus RT-PCR paramyxovirus assay which targets the nucleocapsid gene |
| Subaward Project Description: | |

region.

Subawardee Principal Place of Performance:

**Dhaka, Non-US
1U01AI153420-01**

Subaward Number:

As provided to you by your subawardee, in your subawardee's business or organization's preceding completed fiscal year, did its business or organization (the legal entity to which the DUNS number it provided belongs) receive (1) 80 percent or more of its annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$30,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?:

No

As provided to you by your subawardee, does the public have access to information about the compensation of the executives in the subawardee's business or organization (the legal entity to which the DUNS number it provided belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?:

No

FFATA Report For Grants

Federal Award Identifier Number (FAIN): U01AI153420

Federal Agency ID: 7529

Is this information correct?: Yes

Federal Agency Name: NATIONAL INSTITUTES OF HEALTH

Prime Awardee Unique Entity ID (DUNS): 077090066

Is this information correct?: Yes

EFT Indicator:

Unique Entity ID (SAM): TKS7NBB4JDN6

Prime Awardee Name: ECOHEALTH ALLIANCE INC.

Prime Awardee Address: 520 8TH AVE RM 1200
NEW YORK, New York
100184183

Prime Awardee Parent Unique Entity ID (DUNS): 077090066

Parent Unique Entity ID (SAM): TKS7NBB4JDN6

Principal Place Of Performance (POP): NEW YORK, New York
100184183

CFDA Program Number(s): 93.855 Allergy and Infectious Diseases Research

Is this information correct?: Yes

Project Description: Study of Nipah virus dynamics and genetics in its bat reservoir and of human exposure to NiV across Bangladesh to understand patterns of human outbreaks. Project Summary Nipah virus is a zoonotic paramyxovirus, carried by old world fruit bats across Africa and Asia, which causes severe, fatal encephalitis in humans and can be transmitted from person to person. In Bangladesh, where outbreaks in people occur annually, the primary route of transmission is the consumption of raw date palm sap. Date palm sap is harvested and consumed most intensively in western Bangladesh, an area referred to as the "Nipah belt," however, date palm sap consumption, NiV, and its bat reservoir, Pteropus medius, are present throughout Bangladesh. It is unclear why outbreaks have not been detected in eastern Bangladesh. Cryptic spillover of NiV creates a significant risk that more pathogenic and transmissible strains will emerge and lead to large epidemics. This multidisciplinary project will determine whether NiV outbreaks have occurred in eastern Bangladesh and how differences in human behavior, infection patterns in bats, and genetic variation in circulating strains of NiV influence outbreaks outside of the Nipah belt. This project combines human exposure studies with multi-site longitudinal infection studies in bats and in vivo experimental infections in bats and hamsters comparing clinical outcomes among diverse strains to achieve the following specific aims: 1) To compare NiV exposure and its behavioral determinants among human populations inside and outside the Nipah belt in Bangladesh. We will test the hypothesis that NiV spillover has occurred in Bangladesh in communities outside the Nipah belt. We will use behavioral questionnaires and a multiplex Luminex serological assay to screen high risk populations for IgG antibodies against NiV and determine if Nipah exposure has occurred and how behavioral risk varies by locality. 2) To compare Nipah virus temporal dynamics in Pteropus bat colonies inside and outside of the Nipah belt. We will conduct longitudinal bat NiV field studies in six locations (3 western, 3 eastern), characterize local bat demography, measure changes in seroprevalence over time; determine viral shedding patterns and genetic variation among strains. Through experimental bat infections in a BSL 4 lab, we will determine whether bats with antibodies against NiV (previous exposure) may be re-infected and shed virus. This will answer a critical question about transmission dynamics and allow us to test the hypothesis that viral shedding occurs with different frequency in eastern bats compared to western bats, which may influence zoonotic transmission. 3) To compare pathogenicity and transmissibility of diverse Nipah virus isolates from bats inside and outside the Nipah belt, using animal models. Malaysia type NiV and Bangladesh type have different clinical profiles in people. NiV genetic variation may account for lower human infection rates in eastern Bangladesh. To test this hypothesis, we will compare transmissibility and pathogenicity of diverse NiV strains isolated from Pteropus medius in a Syrian hamster model under BSL 4 conditions.

Is this information correct?: Yes

Total Federal Funding Amount: 1155842.00

Is this information correct?: Yes

Obligation/Action Date: September 15, 2020

Is this information correct?: Yes

Report Month: Oct 2021

In your business or organization's preceding completed fiscal year, did your business or organization (the legal entity to which this specific SAM record, represented by a DUNS number, belongs) receive (1) 80 percent or more of your annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$25,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?: Yes

Does the public have access to information about the compensation of the executives in your business or organization (the legal entity to which this specific SAM record, represented by a DUNS number, belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?: Yes

Subawardee Data

| | | |
|--------------------------------|---|--|
| Subawardee Information: | Subawardee DUNS: | 731531765 |
| | Subcontractor Unique Entity ID (SAM): | QJ2QU5GNKMR5 |
| | Subawardee Name: | INSTITUTE OF EPIDEMIOLOGY, DISEASE CONTROL AND RESEARCH |
| | Subawardee Address: | MOHAKHALI DHAKA, Non-US |
| | Subawardee Parent Unique Entity ID (DUNS): | 731504841 |
| | Amount of Subaward: | 31969.96 |
| | Subaward Obligation/Action Date: | October 31, 2021 |
| | CFDA Program Number(s): | 93.855 Allergy and Infectious Diseases Research |
| | Federal Agency ID: | 7529 |
| | Federal Agency Name: | NATIONAL INSTITUTES OF HEALTH |
| | Subaward Project Description: | â€¢ Coordinate human data collection and analysis as described under the specific aims of the project proposal in partnership with EHA â€¢ Coordinate Nipah outbreak investigations with EHA team, which will be responsible for animal and environmental investigations including but not limited to, the collection of bat samples (primarily roost urine samples) from bat colonies proximal to the suspected index case (within 5 km of the index case village). The IEDCR Director will communicate with EHA Bangladesh coordinator to initiate outbreak investigation activities and the coordinator will communicate activities and findings with the IEDCR director |
| | Subawardee Principal Place of Performance: | Dhaka, Non-US |
| | Subaward Number: | 1U01AI153420-02 |
| | As provided to you by your subawardee, in your subawardee's business or organization's preceding completed fiscal year, did its business or organization (the legal entity to which the Unique Entity ID (DUNS) it provided belongs) receive (1) 80 percent or more of its annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$30,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?: | No |
| | As provided to you by your subawardee, does the public have access to information about the compensation of the executives in the subawardee's business or organization (the legal entity to which the Unique Entity ID (DUNS) it provided belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?: | No |

FFATA Report For Grants

Federal Award Identifier Number (FAIN): U01AI153420

Federal Agency ID: 7529

Is this information correct?: Yes

Federal Agency Name: NATIONAL INSTITUTES OF HEALTH

Prime Awardee Unique Entity ID (DUNS): 077090066

Is this information correct?: Yes

EFT Indicator:

Unique Entity ID (SAM): TKS7NBB4JDN6

Prime Awardee Name: ECOHEALTH ALLIANCE INC.

Prime Awardee Address: 520 8TH AVE RM 1200 NEW YORK, New York 100184183

Prime Awardee Parent Unique Entity ID (DUNS): 077090066

Parent Unique Entity ID (SAM): TKS7NBB4JDN6

Principal Place Of Performance (POP): NEW YORK, New York 100184183

CFDA Program Number(s): 93.855 Allergy and Infectious Diseases Research

Is this information correct?: Yes

Project Description: Study of Nipah virus dynamics and genetics in its bat reservoir and of human exposure to NiV across Bangladesh to understand patterns of human outbreaks... Project Summary Nipah virus is a zoonotic paramyxovirus, carried by old world fruit bats across Africa and Asia, which causes severe, fatal encephalitis in humans and can be transmitted from person to person. In Bangladesh, where outbreaks in people occur annually, the primary route of transmission is the consumption of raw date palm sap. Date palm sap is harvested and consumed most intensively in western Bangladesh, an area referred to as the 'Nipah belt,' however, date palm sap consumption, NiV, and its bat reservoir, Pteropus medius, are present throughout Bangladesh. It is unclear why outbreaks have not been detected in eastern Bangladesh. Cryptic spillover of NiV creates a significant risk that more pathogenic and transmissible strains will emerge and lead to large epidemics. This multidisciplinary project will determine whether NiV outbreaks have occurred in eastern Bangladesh and how differences human behavior, infection patterns in bats, and genetic variation in circulating strains of NiV influence outbreaks outside of the Nipah belt. This project combines human exposure studies with multi-site longitudinal infection studies in bats and in vivo experimental infections in bats and hamsters comparing clinical outcomes among diverse strains to achieve the following specific aims: 1) To compare NiV exposure and its behavioral determinants among human populations inside and outside the Nipah belt in Bangladesh. We will test the hypothesis that NiV spillover has occurred in Bangladesh in communities outside the Nipah belt. We will use behavioral questionnaires and a multiplex Luminex serological assay to screen high risk populations for IgG antibodies against NiV and determine if Nipah exposure has occurred and how behavioral risk varies by locality. 2) To compare Nipah virus temporal dynamics in Pteropus bat colonies inside and outside of the Nipah belt. We will conduct longitudinal bat NiV field studies in six locations (3 western, 3 eastern), characterize local bat demography, measure changes in seroprevalence over time; determine viral shedding patterns and genetic variation among strains. Through experimental bat infections in a BSL 4 lab, we will determine whether bats with antibodies against NiV (previous exposure) may be re-infected and shed virus. This will answer a critical question about transmission dynamics and allow us to test the hypothesis that viral shedding occurs with different frequency in eastern bats compared to western bats, which may influence zoonotic transmission. 3) To compare pathogenicity and transmissibility of diverse Nipah virus isolates from bats inside and outside the Nipah belt, using animal models. Malaysia type NiV and Bangladesh type have different clinical profiles in people. NiV genetic variation may account for lower human infection rates in eastern Bangladesh. To test this hypothesis, we will compare transmissibility and pathogenicity of diverse NiV strains isolated from Pteropus medius in a Syrian hamster model under BSL 4 conditions.

Is this information correct?: Yes

Total Federal Funding Amount: 1155842.00

Is this information correct?: Yes

Obligation/Action Date: September 15, 2020

Is this information correct?: Yes

Report Month: Nov 2021

In your business or organization's preceding completed fiscal year, did your business or organization (the legal entity to which this specific SAM record, represented by a DUNS number, belongs) receive (1) 80 percent or more of your annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$25,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements? Yes

Does the public have access to information about the compensation of the executives in your business or organization (the legal entity to which this specific SAM record, represented by a DUNS number, belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986? Yes

Subawardee Data

| | | |
|--------------------------------|---|--|
| Subawardee Information: | Subawardee DUNS: | 731531765 |
| | Subcontractor Unique Entity ID (SAM): | QJ2QU5GNKMR5 |
| | Subawardee Name: | INSTITUTE OF EPIDEMIOLOGY, DISEASE CONTROL AND RESEARCH |
| | Subawardee Address: | MOHAKHALI DHAKA, Non-US |
| | Subawardee Parent Unique Entity ID (DUNS): | 731504841 |
| | Amount of Subaward: | 50944.21 |
| | Subaward Obligation/Action Date: | November 30, 2021 |
| | CFDA Program Number(s): | 93.855 Allergy and Infectious Diseases Research |
| | Federal Agency ID: | 7529 |
| | Federal Agency Name: | NATIONAL INSTITUTES OF HEALTH |
| | Subaward Project Description: | â€¢ Coordinate human data collection and analysis as described under the specific aims of the project proposal in partnership with EHA â€¢ Coordinate Nipah outbreak investigations with EHA team, which will be responsible for animal and environmental investigations including but not limited to, the collection of bat samples (primarily roost urine samples) from bat colonies proximal to the suspected index case (within 5 km of the index case village). The IEDCR Director will communicate with EHA Bangladesh coordinator to initiate outbreak investigation activities and the coordinator will communicate activities and findings with the IEDCR director |
| | Subawardee Principal Place of Performance: | Dhaka, Non-US |
| | Subaward Number: | 1U01AI153420-02 |
| | As provided to you by your subawardee, in your subawardee's business or organization's preceding completed fiscal year, did its business or organization (the legal entity to which the Unique Entity ID (DUNS) it provided belongs) receive (1) 80 percent or more of its annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$30,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?: | No |
| | As provided to you by your subawardee, does the public have access to information about the compensation of the executives in the subawardee's business or organization (the legal entity to which the Unique Entity ID (DUNS) it provided belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?: | No |

FFATA Report For Grants

Federal Award Identifier Number (FAIN): U01AI151797

Federal Agency ID: 7529

Is this information correct?: Yes

Federal Agency Name: NATIONAL INSTITUTES OF HEALTH

Prime Awardee DUNS #:077090066

Is this information correct?: Yes

DUNS Number +4:

Prime Awardee Name:ECOHEALTH ALLIANCE INC.

Prime Awardee Address:520 8TH AVE RM 1200
NEW YORK, New York
100184183

Prime Awardee Parent DUNS #: 077090066

Principal Place Of Performance(POP): NEW YORK, New York
100184183

CFDA Program Number(s): 93.855 Allergy and Infectious Diseases Research

Is this information correct?: Yes

Project Description: Understanding Risk of Zoonotic Virus Emergence in EID Hotspots of Southeast Asia - PROJECT SUMMARY/ABSTRACT Southeast Asia is one of the world's highest-risk EID hotspots, the origin of the SARS pandemic, Nipah virus, and repeated outbreaks of influenza. This is driven by high diversity of wildlife and rapidly expanding demography that brings human and wildlife populations closer. This proposal will launch the Emerging Infectious Diseases - South East Asia Research Collaboration Hub (EID-SEARCH), a collaboration among leaders in emerging disease research in the USA, Thailand, Singapore and the 3 major Malaysian administrative regions. These researchers have networks that span >50 clinics, laboratories and research institutions across almost all SE Asian countries and will use the EID-SEARCH as an early warning system for outbreaks involving exchange of information, reagents, samples and technology, and a collaborative power- house for fundamental and translational research. The EID-SEARCH will also act as a significant asset to scale-up and deploy resources in the case of an outbreak in the region. This EIDRC will conduct research to: 1) Identify, characterize and rank spillover risk of high zoonotic potential viruses from wildlife, by analyzing previously-archived wildlife samples, conducting targeted wildlife surveillance, and using serology & PCR assays to identify novel viruses. These will be characterized to assess risk of spillover to people, and a series of in vitro (receptor binding, cell culture) and in vivo (humanized mouse and collaborative cross models) assays used to assess their potential to infect people and cause disease; 2) Collect samples and questionnaire data from human communities that live in EID hotspots and have high cultural and behavioral risk of animal exposure (e.g. wildlife hunting, bat guano collection). These will be tested with serological assays to identify evidence of novel virus spillover, and analyzed against metadata to identify key risk pathways for transmission; 3) Identify and characterize viral etiology of "cryptic" outbreaks in clinical cohorts. We will conduct syndromic surveillance at clinics serving the populations in Aim 2, enroll patients with undiagnosed illness and symptoms consistent with emerging viral pathogens, and test samples with molecular and follow-up serological assays to identify causal links between these syndromes and novel viruses. This research will advance our understanding of the risk of novel viral emergence in a uniquely important region. It will also strengthen in-country research capacity by linking local infectious disease scientists with an international collaborative network that has proven capacity to conduct this work and produce significant findings. The large body of high impact collaborative research from this EIDRC leadership team provides proof-of-concept that EID-SEARCH has the background, collaborative network, experience, and skillset to act as a unique early warning system for novel EIDs of any etiology threatening to emerge in this hottest of the EID hotspots.

Is this information correct?: Yes

Total Federal Funding Amount: 3052312.00

Is this information correct?: Yes

Obligation/Action Date:June 17, 2020

Is this information correct?: Yes

Report Month:Dec 2020

In your business or organization's preceding completed fiscal year, did your business or organization (the legal entity to which this specific SAM record, represented by a DUNS number, belongs) receive (1) 80 percent or more of your annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$25,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements? Yes

Does the public have access to information about the compensation of the executives in your business or organization (the legal entity to which this specific SAM record, represented by a DUNS number, belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986? Yes

Subawardee Data

Subawardee Information: Subawardee DUNS:

659808836

Subawardee Name:

CHULALONGKORN UNIVERSITY

Subawardee Doing Business As Name:

CU

| | |
|---|---|
| Subawardee Address: | 254 PHAYATHAI ROAD PATHUM WAN, Non-US |
| Subawardee Parent DUNS: | 660723081 |
| Amount of Subaward: | 25000.00 |
| Subaward Obligation/Action Date: | December 31, 2020 |
| CFDA Program Number(s): | 93.855 Allergy and Infectious Diseases Research |
| Federal Agency ID: | 7529 |
| Federal Agency Name: | NATIONAL INSTITUTES OF HEALTH Research to analyze previously-archived wildlife samples, conduct targeted wildlife surveillance, and use serology & PCR assays to identify, characterize and assess spillover risk of high zoonotic potential viruses from wildlife; conduct biological-behavioral surveillance among the at-risk communities and to identify evidence of novel virus spillover and key risk pathways for transmission; conduct syndromic surveillance among clinical patients with undiagnosed illness and symptoms consistent with emerging viral pathogens to identify and characterize viral etiology of "cryptic" outbreaks. |
| Subaward Project Description: | |
| Subawardee Principal Place of Performance: | PATHUM WAN, Non-US |
| Subaward Number: | 1U01AI151797-01 |
| As provided to you by your subawardee, in your subawardee's business or organization's preceding completed fiscal year, did its business or organization (the legal entity to which the DUNS number it provided belongs) receive (1) 80 percent or more of its annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$30,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?: | No |
| As provided to you by your subawardee, does the public have access to information about the compensation of the executives in the subawardee's business or organization (the legal entity to which the DUNS number it provided belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?: | No |
| Subawardee DUNS: | 534409256 |
| Subawardee Name: | CONSERVATION MEDICINE LTD |
| Subawardee Address: | LOT NO.20 LEVEL 1 LAZENDA COMMERCIAL CENTRE PHASE 3 JALAN OKK ABDULLAH LABUAN, Non-US |
| Amount of Subaward: | 86311.00 |
| Subaward Obligation/Action Date: | December 31, 2020 |
| CFDA Program Number(s): | 93.855 Allergy and Infectious Diseases Research |
| Federal Agency ID: | 7529 |
| Federal Agency Name: | NATIONAL INSTITUTES OF HEALTH Coordinate and conduct all field work and lab work in Malaysia including bat and rodent sampling at cave sites; sampling of high risk communities; syndromic surveillance; and characterization of novel paramyxoviruses and corona viruses; facilitate and coordinate training workshops and capacity building efforts at partner institutions; facilitate communication between prime and country collaborators; ensure all in-country permits and permissions are in place to conduct the work; work with in-country partners to identify archived samples to screen; prepare reports for stakeholders and collaborators; contribute to data analysis, manuscript preparation, and dissemination of results to stakeholders |
| Subaward Project Description: | |
| Subawardee Principal Place of Performance: | LABUAN, Non-US |
| Subaward Number: | 1U01AI151797-01 |
| As provided to you by your subawardee, in your subawardee's business or organization's preceding completed fiscal year, did its business or organization (the legal entity to which the DUNS number it provided belongs) receive (1) 80 percent or more of its annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$30,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?: | No |
| As provided to you by your subawardee, does the public have access to information about the compensation of the executives in the subawardee's business or organization (the legal entity to which the DUNS number it provided belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?: | No |

FFATA Report For Grants

Federal Award Identifier Number (FAIN): U01AI151797

Federal Agency ID: 7529

Is this information correct?: Yes

Federal Agency Name: NATIONAL INSTITUTES OF HEALTH

Prime Awardee DUNS #:077090066

Is this information correct?: Yes

DUNS Number +4:

Prime Awardee Name:ECOHEALTH ALLIANCE INC.

Prime Awardee Address:520 8TH AVE RM 1200
NEW YORK, New York
100184183

Prime Awardee Parent DUNS #: 077090066

Principal Place Of Performance(POP): NEW YORK, New York
100184183

CFDA Program Number(s): 93.855 Allergy and Infectious Diseases Research

Is this information correct?: Yes

Project Description: Understanding Risk of Zoonotic Virus Emergence in EID Hotspots of Southeast Asia - PROJECT SUMMARY/ABSTRACT Southeast Asia is one of the world's highest-risk EID hotspots, the origin of the SARS pandemic, Nipah virus, and repeated outbreaks of influenza. This is driven by high diversity of wildlife and rapidly expanding demography that brings human and wildlife populations closer. This proposal will launch the Emerging Infectious Diseases - South East Asia Research Collaboration Hub (EID-SEARCH), a collaboration among leaders in emerging disease research in the USA, Thailand, Singapore and the 3 major Malaysian administrative regions. These researchers have networks that span >50 clinics, laboratories and research institutions across almost all SE Asian countries and will use the EID-SEARCH as an early warning system for outbreaks involving exchange of information, reagents, samples and technology, and a collaborative power-house for fundamental and translational research. The EID-SEARCH will also act as a significant asset to scale-up and deploy resources in the case of an outbreak in the region. This EIDRC will conduct research to: 1) Identify, characterize and rank spillover risk of high zoonotic potential viruses from wildlife, by analyzing previously-archived wildlife samples, conducting targeted wildlife surveillance, and using serology & PCR assays to identify novel viruses. These will be characterized to assess risk of spillover to people, and a series of in vitro (receptor binding, cell culture) and in vivo (humanized mouse and collaborative cross models) assays used to assess their potential to infect people and cause disease; 2) Collect samples and questionnaire data from human communities that live in EID hotspots and have high cultural and behavioral risk of animal exposure (e.g. wildlife hunting, bat guano collection). These will be tested with serological assays to identify evidence of novel virus spillover, and analyzed against metadata to identify key risk pathways for transmission; 3) Identify and characterize viral etiology of "cryptic" outbreaks in clinical cohorts. We will conduct syndromic surveillance at clinics serving the populations in Aim 2, enroll patients with undiagnosed illness and symptoms consistent with emerging viral pathogens, and test samples with molecular and follow-up serological assays to identify causal links between these syndromes and novel viruses. This research will advance our understanding of the risk of novel viral emergence in a uniquely important region. It will also strengthen in-country research capacity by linking local infectious disease scientists with an international collaborative network that has proven capacity to conduct this work and produce significant findings. The large body of high impact collaborative research from this EIDRC leadership team provides proof-of-concept that EID-SEARCH has the background, collaborative network, experience, and skillset to act as a unique early warning system for novel EIDs of any etiology threatening to emerge in this hottest of the EID hotspots.

Is this information correct?: Yes

Total Federal Funding Amount: 3052312.00

Is this information correct?: Yes

Obligation/Action Date: June 17, 2020

Is this information correct?: Yes

Report Month: Feb 2021

In your business or organization's preceding completed fiscal year, did your business or organization (the legal entity to which this specific SAM record, represented by a DUNS number, belongs) receive (1) 80 percent or more of your annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$25,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?: Yes

Does the public have access to information about the compensation of the executives in your business or organization (the legal entity to which this specific SAM record, represented by a DUNS number, belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?: Yes

Subawardee Data

Subawardee Information: Subawardee DUNS:
Subawardee Name:

534409256
CONSERVATION MEDICINE LTD
LOT NO.20 LEVEL 1 LAZENDA COMMERCIAL CENTRE

Subawardee Address: **PHASE 3 JALAN OKK ABDULLAH
LABUAN, Non-US**

Amount of Subaward: **25000.00**

Subaward Obligation/Action Date: **February 28, 2021**

CFDA Program Number(s): **93.855 Allergy and Infectious Diseases Research**

Federal Agency ID: **7529**

Federal Agency Name: **NATIONAL INSTITUTES OF HEALTH**

Subaward Project Description: **Coordinate and conduct all field work and lab work in Malaysia including bat and rodent sampling at cave sites; sampling of high risk communities; syndromic surveillance; and characterization of novel paramyxoviruses and corona viruses; facilitate and coordinate training workshops and capacity building efforts at partner institutions; facilitate communication between prime and country collaborators; ensure all in-country permits and permissions are in place to conduct the work; work with in-country partners to identify archived samples to screen; prepare reports for stakeholders and collaborators; contribute to data analysis, manuscript preparation, and dissemination of results to stakeholders**

Subawardee Principal Place of Performance: **Labuan, Non-US**

Subaward Number: **1U01AI151797-01**

As provided to you by your subawardee, in your subawardee's business or organization's preceding completed fiscal year, did its business or organization (the legal entity to which the DUNS number it provided belongs) receive (1) 80 percent or more of its annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$30,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?: **No**

As provided to you by your subawardee, does the public have access to information about the compensation of the executives in the subawardee's business or organization (the legal entity to which the DUNS number it provided belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?: **No**

FFATA Report For Grants

Federal Award Identifier Number (FAIN): U01AI151797

Federal Agency ID: 7529

Is this information correct?: Yes

Federal Agency Name: NATIONAL INSTITUTES OF HEALTH

Prime Awardee DUNS #:077090066

Is this information correct?: Yes

DUNS Number +4:

Prime Awardee Name:ECOHEALTH ALLIANCE INC.

Prime Awardee Address:520 8TH AVE RM 1200
NEW YORK, New York
100184183

Prime Awardee Parent DUNS #: 077090066

Principal Place Of Performance(POP): NEW YORK, New York
100184183

CFDA Program Number(s): 93.855 Allergy and Infectious Diseases Research

Is this information correct?: Yes

Project Description: Understanding Risk of Zoonotic Virus Emergence in EID Hotspots of Southeast Asia - PROJECT SUMMARY/ABSTRACT Southeast Asia is one of the world's highest-risk EID hotspots, the origin of the SARS pandemic, Nipah virus, and repeated outbreaks of influenza. This is driven by high diversity of wildlife and rapidly expanding demography that brings human and wildlife populations closer. This proposal will launch the Emerging Infectious Diseases - South East Asia Research Collaboration Hub (EID-SEARCH), a collaboration among leaders in emerging disease research in the USA, Thailand, Singapore and the 3 major Malaysian administrative regions. These researchers have networks that span >50 clinics, laboratories and research institutions across almost all SE Asian countries and will use the EID-SEARCH as an early warning system for outbreaks involving exchange of information, reagents, samples and technology, and a collaborative power-house for fundamental and translational research. The EID-SEARCH will also act as a significant asset to scale-up and deploy resources in the case of an outbreak in the region. This EIDRC will conduct research to: 1) Identify, characterize and rank spillover risk of high zoonotic potential viruses from wildlife, by analyzing previously-archived wildlife samples, conducting targeted wildlife surveillance, and using serology & PCR assays to identify novel viruses. These will be characterized to assess risk of spillover to people, and a series of in vitro (receptor binding, cell culture) and in vivo (humanized mouse and collaborative cross models) assays used to assess their potential to infect people and cause disease; 2) Collect samples and questionnaire data from human communities that live in EID hotspots and have high cultural and behavioral risk of animal exposure (e.g. wildlife hunting, bat guano collection). These will be tested with serological assays to identify evidence of novel virus spillover, and analyzed against metadata to identify key risk pathways for transmission; 3) Identify and characterize viral etiology of "cryptic" outbreaks in clinical cohorts. We will conduct syndromic surveillance at clinics serving the populations in Aim 2, enroll patients with undiagnosed illness and symptoms consistent with emerging viral pathogens, and test samples with molecular and follow-up serological assays to identify causal links between these syndromes and novel viruses. This research will advance our understanding of the risk of novel viral emergence in a uniquely important region. It will also strengthen in-country research capacity by linking local infectious disease scientists with an international collaborative network that has proven capacity to conduct this work and produce significant findings. The large body of high impact collaborative research from this EIDRC leadership team provides proof-of-concept that EID-SEARCH has the background, collaborative network, experience, and skillset to act as a unique early warning system for novel EIDs of any etiology threatening to emerge in this hottest of the EID hotspots.

Is this information correct?: Yes

Total Federal Funding Amount: 3052312.00

Is this information correct?: Yes

Obligation/Action Date: June 17, 2020

Is this information correct?: Yes

Report Month: Apr 2021

In your business or organization's preceding completed fiscal year, did your business or organization (the legal entity to which this specific SAM record, represented by a DUNS number, belongs) receive (1) 80 percent or more of your annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$25,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements? Yes

Does the public have access to information about the compensation of the executives in your business or organization (the legal entity to which this specific SAM record, represented by a DUNS number, belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986? Yes

Subawardee Data

Subawardee Information: Subawardee DUNS: 659808836
Subawardee Name: CHULALONGKORN UNIVERSITY
Subawardee Doing Business As Name: CU

| | |
|---|---|
| Subawardee Address: | 254 PHAYATHAI ROAD PATHUM WAN, Non-US |
| Subawardee Parent DUNS: | 660723081 |
| Amount of Subaward: | 110000.00 |
| Subaward Obligation/Action Date: | April 30, 2021 |
| CFDA Program Number(s): | 93.855 Allergy and Infectious Diseases Research |
| Federal Agency ID: | 7529 |
| Federal Agency Name: | NATIONAL INSTITUTES OF HEALTH Research to analyze previously-archived wildlife samples, conduct targeted wildlife surveillance, and use serology & PCR assays to identify, characterize and assess spillover risk of high zoonotic potential viruses from wildlife; conduct biological-behavioral surveillance among the at-risk communities and to identify evidence of novel virus spillover and key risk pathways for transmission; conduct syndromic surveillance among clinical patients with undiagnosed illness and symptoms consistent with emerging viral pathogens to identify and characterize viral etiology of "cryptic" outbreaks. |
| Subaward Project Description: | |
| Subawardee Principal Place of Performance: | PATHUM WAN, Non-US |
| Subaward Number: | 1U01AI151797-01 |
| As provided to you by your subawardee, in your subawardee's business or organization's preceding completed fiscal year, did its business or organization (the legal entity to which the DUNS number it provided belongs) receive (1) 80 percent or more of its annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$30,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?: | No |
| As provided to you by your subawardee, does the public have access to information about the compensation of the executives in the subawardee's business or organization (the legal entity to which the DUNS number it provided belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?: | No |
| Subawardee DUNS: | 608195277 |
| Subawardee Name: | UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL |
| Subawardee Doing Business As Name: | OFFICE OF SPONSORED RESEARCH |
| Subawardee Address: | 104 AIRPORT DR STE 2200 CHAPEL HILL, North Carolina 275995023 |
| Subawardee Parent DUNS: | 142363428 |
| Amount of Subaward: | 47524.06 |
| Subaward Obligation/Action Date: | April 30, 2021 |
| CFDA Program Number(s): | 93.855 Allergy and Infectious Diseases Research |
| Federal Agency ID: | 7529 |
| Federal Agency Name: | NATIONAL INSTITUTES OF HEALTH Conduct systematic studies on the epidemiology, evolution, and mechanisms of bat borne CoVs; develop LIPS assays for CoV antibody detection; serological testing of bat samples; meeting with team members to refine study design and protocols and prepare publications; design research strategies, interpret findings and review research outcomes; report the results to prime and use this information to identify additional research priorities and design downstream studies; prepare timely reports, share research, and discuss future research directions with the group. |
| Subaward Project Description: | |
| Subawardee Principal Place of Performance: | Chapel hill, North Carolina 275991350 |
| Subaward Number: | 1U01AI151797-01 |
| As provided to you by your subawardee, in your subawardee's business or organization's preceding completed fiscal year, did its business or organization (the legal entity to which the DUNS number it provided belongs) receive (1) 80 percent or more of its annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$30,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?: | No |
| As provided to you by your subawardee, does the public have access to information about the compensation of the executives in the subawardee's business or organization (the legal entity to which the DUNS number it provided belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?: | No |

FFATA Report For Grants

Federal Award Identifier Number (FAIN): U01AI151797

Federal Agency ID: 7529

Is this information correct?: Yes

Federal Agency Name: NATIONAL INSTITUTES OF HEALTH

Prime Awardee DUNS #:077090066

Is this information correct?: Yes

DUNS Number +4:

Prime Awardee Name:ECOHEALTH ALLIANCE INC.

Prime Awardee Address:520 8TH AVE RM 1200
NEW YORK, New York
100184183

Prime Awardee Parent DUNS #: 077090066

Principal Place Of Performance(POP): NEW YORK, New York
100184183

CFDA Program Number(s): 93.855 Allergy and Infectious Diseases Research

Is this information correct?: Yes

Project Description: Understanding Risk of Zoonotic Virus Emergence in EID Hotspots of Southeast Asia - PROJECT SUMMARY/ABSTRACT Southeast Asia is one of the world's highest-risk EID hotspots, the origin of the SARS pandemic, Nipah virus, and repeated outbreaks of influenza. This is driven by high diversity of wildlife and rapidly expanding demography that brings human and wildlife populations closer. This proposal will launch the Emerging Infectious Diseases - South East Asia Research Collaboration Hub (EID-SEARCH), a collaboration among leaders in emerging disease research in the USA, Thailand, Singapore and the 3 major Malaysian administrative regions. These researchers have networks that span >50 clinics, laboratories and research institutions across almost all SE Asian countries and will use the EID-SEARCH as an early warning system for outbreaks involving exchange of information, reagents, samples and technology, and a collaborative power-house for fundamental and translational research. The EID-SEARCH will also act as a significant asset to scale-up and deploy resources in the case of an outbreak in the region. This EIDRC will conduct research to: 1) Identify, characterize and rank spillover risk of high zoonotic potential viruses from wildlife, by analyzing previously-archived wildlife samples, conducting targeted wildlife surveillance, and using serology & PCR assays to identify novel viruses. These will be characterized to assess risk of spillover to people, and a series of in vitro (receptor binding, cell culture) and in vivo (humanized mouse and collaborative cross models) assays used to assess their potential to infect people and cause disease; 2) Collect samples and questionnaire data from human communities that live in EID hotspots and have high cultural and behavioral risk of animal exposure (e.g. wildlife hunting, bat guano collection). These will be tested with serological assays to identify evidence of novel virus spillover, and analyzed against metadata to identify key risk pathways for transmission; 3) Identify and characterize viral etiology of "cryptic" outbreaks in clinical cohorts. We will conduct syndromic surveillance at clinics serving the populations in Aim 2, enroll patients with undiagnosed illness and symptoms consistent with emerging viral pathogens, and test samples with molecular and follow-up serological assays to identify causal links between these syndromes and novel viruses. This research will advance our understanding of the risk of novel viral emergence in a uniquely important region. It will also strengthen in-country research capacity by linking local infectious disease scientists with an international collaborative network that has proven capacity to conduct this work and produce significant findings. The large body of high impact collaborative research from this EIDRC leadership team provides proof-of-concept that EID-SEARCH has the background, collaborative network, experience, and skillset to act as a unique early warning system for novel EIDs of any etiology threatening to emerge in this hottest of the EID hotspots.

Is this information correct?: Yes

Total Federal Funding Amount: 3052312.00

Is this information correct?: Yes

Obligation/Action Date: June 17, 2020

Is this information correct?: Yes

Report Month: May 2021

In your business or organization's preceding completed fiscal year, did your business or organization (the legal entity to which this specific SAM record, represented by a DUNS number, belongs) receive (1) 80 percent or more of your annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$25,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements? Yes

Does the public have access to information about the compensation of the executives in your business or organization (the legal entity to which this specific SAM record, represented by a DUNS number, belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986? Yes

Subawardee Data

Subawardee Information: Subawardee DUNS:

608195277

Subawardee Name:

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

Subawardee Doing Business As Name:

OFFICE OF SPONSORED RESEARCH

| | |
|---|---|
| Subawardee Address: | 104 AIRPORT DR STE 2200 CHAPEL HILL, North Carolina 275995023 |
| Subawardee Parent DUNS: | 142363428 |
| Amount of Subaward: | 43135.13 |
| Subaward Obligation/Action Date: | May 31, 2021 |
| CFDA Program Number(s): | 93.855 Allergy and Infectious Diseases Research |
| Federal Agency ID: | 7529 |
| Federal Agency Name: | NATIONAL INSTITUTES OF HEALTH Conduct systematic studies on the epidemiology, evolution, and mechanisms of bat borne CoVs; develop LIPS assays for CoV antibody detection; serological testing of bat samples; meeting with team members to refine study design and protocols and prepare publications; design research strategies, interpret findings and review research outcomes; report the results to prime and use this information to identify additional research priorities and design downstream studies; prepare timely reports, share research, and discuss future research directions with the group. |
| Subaward Project Description: | |
| Subawardee Principal Place of Performance: | Chapel Hill, North Carolina 275991350 |
| Subaward Number: | 1U01AI151797-01 |
| As provided to you by your subawardee, in your subawardee's business or organization's preceding completed fiscal year, did its business or organization (the legal entity to which the DUNS number it provided belongs) receive (1) 80 percent or more of its annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$30,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?: | No |
| As provided to you by your subawardee, does the public have access to information about the compensation of the executives in the subawardee's business or organization (the legal entity to which the DUNS number it provided belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?: | No |
| Subawardee DUNS: | 659808836 |
| Subawardee Name: | CHULALONGKORN UNIVERSITY |
| Subawardee Doing Business As Name: | CU |
| Subawardee Address: | 254 PHAYATHAI ROAD PATHUM WAN, Non-US |
| Subawardee Parent DUNS: | 660723081 |
| Amount of Subaward: | 25000.00 |
| Subaward Obligation/Action Date: | May 31, 2021 |
| CFDA Program Number(s): | 93.855 Allergy and Infectious Diseases Research |
| Federal Agency ID: | 7529 |
| Federal Agency Name: | NATIONAL INSTITUTES OF HEALTH Research to analyze previously-archived wildlife samples, conduct targeted wildlife surveillance, and use serology & PCR assays to identify, characterize and assess spillover risk of high zoonotic potential viruses from wildlife; conduct biological-behavioral surveillance among the at-risk communities and to identify evidence of novel virus spillover and key risk pathways for transmission; conduct syndromic surveillance among clinical patients with undiagnosed illness and symptoms consistent with emerging viral pathogens to identify and characterize viral etiology of acute cryptic outbreaks. |
| Subaward Project Description: | |
| Subawardee Principal Place of Performance: | PATHUM WAN, Non-US |
| Subaward Number: | 1U01AI151797-01 |
| As provided to you by your subawardee, in your subawardee's business or organization's preceding completed fiscal year, did its business or organization (the legal entity to which the DUNS number it provided belongs) receive (1) 80 percent or more of its annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$30,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?: | No |
| As provided to you by your subawardee, does the public have access to information about the compensation of the executives in the subawardee's business or organization (the legal entity to which the DUNS number it provided belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?: | No |

FFATA Report For Grants

Federal Award Identifier Number (FAIN): U01AI151797

Federal Agency ID: 7529

Is this information correct?: Yes

Federal Agency Name: NATIONAL INSTITUTES OF HEALTH

Prime Awardee DUNS #:077090066

Is this information correct?: Yes

DUNS Number +4:

Prime Awardee Name:ECOHEALTH ALLIANCE INC.

Prime Awardee Address:520 8TH AVE RM 1200
NEW YORK, New York
100184183

Prime Awardee Parent DUNS #: 077090066

Principal Place Of Performance(POP): NEW YORK, New York
100184183

CFDA Program Number(s): 93.855 Allergy and Infectious Diseases Research

Is this information correct?: Yes

Project Description: Understanding Risk of Zoonotic Virus Emergence in EID Hotspots of Southeast Asia - PROJECT SUMMARY/ABSTRACT Southeast Asia is one of the world's highest-risk EID hotspots, the origin of the SARS pandemic, Nipah virus, and repeated outbreaks of influenza. This is driven by high diversity of wildlife and rapidly expanding demography that brings human and wildlife populations closer. This proposal will launch the Emerging Infectious Diseases - South East Asia Research Collaboration Hub (EID-SEARCH), a collaboration among leaders in emerging disease research in the USA, Thailand, Singapore and the 3 major Malaysian administrative regions. These researchers have networks that span >50 clinics, laboratories and research institutions across almost all SE Asian countries and will use the EID-SEARCH as an early warning system for outbreaks involving exchange of information, reagents, samples and technology, and a collaborative power-house for fundamental and translational research. The EID-SEARCH will also act as a significant asset to scale-up and deploy resources in the case of an outbreak in the region. This EIDRC will conduct research to: 1) Identify, characterize and rank spillover risk of high zoonotic potential viruses from wildlife, by analyzing previously-archived wildlife samples, conducting targeted wildlife surveillance, and using serology & PCR assays to identify novel viruses. These will be characterized to assess risk of spillover to people, and a series of in vitro (receptor binding, cell culture) and in vivo (humanized mouse and collaborative cross models) assays used to assess their potential to infect people and cause disease; 2) Collect samples and questionnaire data from human communities that live in EID hotspots and have high cultural and behavioral risk of animal exposure (e.g. wildlife hunting, bat guano collection). These will be tested with serological assays to identify evidence of novel virus spillover, and analyzed against metadata to identify key risk pathways for transmission; 3) Identify and characterize viral etiology of "cryptic" outbreaks in clinical cohorts. We will conduct syndromic surveillance at clinics serving the populations in Aim 2, enroll patients with undiagnosed illness and symptoms consistent with emerging viral pathogens, and test samples with molecular and follow-up serological assays to identify causal links between these syndromes and novel viruses. This research will advance our understanding of the risk of novel viral emergence in a uniquely important region. It will also strengthen in-country research capacity by linking local infectious disease scientists with an international collaborative network that has proven capacity to conduct this work and produce significant findings. The large body of high impact collaborative research from this EIDRC leadership team provides proof-of-concept that EID-SEARCH has the background, collaborative network, experience, and skillset to act as a unique early warning system for novel EIDs of any etiology threatening to emerge in this hottest of the EID hotspots.

Is this information correct?: Yes

Total Federal Funding Amount: 3052312.00

Is this information correct?: Yes

Obligation/Action Date: June 17, 2020

Is this information correct?: Yes

Report Month: Jun 2021

In your business or organization's preceding completed fiscal year, did your business or organization (the legal entity to which this specific SAM record, represented by a DUNS number, belongs) receive (1) 80 percent or more of your annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$25,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements? Yes

Does the public have access to information about the compensation of the executives in your business or organization (the legal entity to which this specific SAM record, represented by a DUNS number, belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986? Yes

Subawardee Data

Subawardee Information: Subawardee DUNS:

608195277

Subawardee Name:

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

Subawardee Doing Business As Name:

OFFICE OF SPONSORED RESEARCH

| | |
|---|---|
| Subawardee Address: | 104 AIRPORT DR STE 2200 CHAPEL HILL, North Carolina 275995023 |
| Subawardee Parent DUNS: | 142363428 |
| Amount of Subaward: | 35423.92 |
| Subaward Obligation/Action Date: | June 30, 2021 |
| CFDA Program Number(s): | 93.855 Allergy and Infectious Diseases Research |
| Federal Agency ID: | 7529 |
| Federal Agency Name: | NATIONAL INSTITUTES OF HEALTH Conduct systematic studies on the epidemiology, evolution, and mechanisms of bat borne CoVs; develop LIPS assays for CoV antibody detection; serological testing of bat samples; meeting with team members to refine study design and protocols and prepare publications; design research strategies, interpret findings and review research outcomes; report the results to prime and use this information to identify additional research priorities and design downstream studies; prepare timely reports, share research, and discuss future research directions with the group. |
| Subaward Project Description: | |
| Subawardee Principal Place of Performance: | Chapel Hill, North Carolina 275991350 |
| Subaward Number: | 1U01AI151797-01 |
| As provided to you by your subawardee, in your subawardee's business or organization's preceding completed fiscal year, did its business or organization (the legal entity to which the DUNS number it provided belongs) receive (1) 80 percent or more of its annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$30,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?: | No |
| As provided to you by your subawardee, does the public have access to information about the compensation of the executives in the subawardee's business or organization (the legal entity to which the DUNS number it provided belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?: | No |
| Subawardee DUNS: | 534409256 |
| Subawardee Name: | CONSERVATION MEDICINE LTD LOT NO.20 LEVEL 1 LAZENDA COMMERCIAL CENTRE PHASE 3 JALAN OKK ABDULLAH LABUAN, Non-US |
| Subawardee Address: | 89746.03 |
| Amount of Subaward: | June 30, 2021 |
| Subaward Obligation/Action Date: | 93.855 Allergy and Infectious Diseases Research |
| CFDA Program Number(s): | 7529 |
| Federal Agency ID: | NATIONAL INSTITUTES OF HEALTH |
| Federal Agency Name: | Coordinate and conduct all field work and lab work in Malaysia including bat and rodent sampling at cave sites; sampling of high risk communities; syndromic surveillance; and characterization of novel paramyxoviruses and corona viruses; facilitate and coordinate training workshops and capacity building efforts at partner institutions; facilitate communication between prime and country collaborators; ensure all in-country permits and |
| Subaward Project Description: | |

permissions are in place to conduct the work; work with in-country partners to identify archived samples to screen; prepare reports for stakeholders and collaborators; contribute to data analysis, manuscript preparation, and dissemination of results to stakeholders

Subawardee Principal Place of Performance:

Labuan, Non-US
1U01AI151797-01

Subaward Number:

As provided to you by your subawardee, in your subawardee's business or organization's preceding completed fiscal year, did its business or organization (the legal entity to which the DUNS number it provided belongs) receive (1) 80 percent or more of its annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$30,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?:

No

As provided to you by your subawardee, does the public have access to information about the compensation of the executives in the subawardee's business or organization (the legal entity to which the DUNS number it provided belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?:

No

Subawardee DUNS:

659808836

Subawardee Name:

CHULALONGKORN UNIVERSITY

Subawardee Doing Business As Name:

CU

Subawardee Address:

254 PHAYATHAI ROAD
PATHUM WAN, Non-US

Subawardee Parent DUNS:

660723081

Amount of Subaward:

55944.56

Subaward Obligation/Action Date:

June 30, 2021

CFDA Program Number(s):

93.855 Allergy and Infectious Diseases Research

Federal Agency ID:

7529

Federal Agency Name:

NATIONAL INSTITUTES OF HEALTH

Research to analyze previously-archived wildlife samples, conduct targeted wildlife surveillance, and use serology & PCR assays to identify, characterize and assess spillover risk of high zoonotic potential viruses from wildlife; conduct biological-behavioral surveillance among the at-risk communities and to identify evidence of novel virus spillover and key risk pathways for transmission; conduct syndromic surveillance among clinical patients with undiagnosed illness and symptoms consistent with emerging viral pathogens to identify and characterize viral etiology of "cryptic" outbreaks.

Subaward Project Description:

Subawardee Principal Place of Performance:

PATHUM WAN, Non-US

Subaward Number:

1U01AI151797-01

As provided to you by your subawardee, in your subawardee's business or organization's preceding completed fiscal year, did its business or organization (the legal entity to which the DUNS number it provided belongs) receive (1) 80 percent or more of its annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$30,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?:

No

As provided to you by your subawardee, does the public have access to information about the compensation of the executives in the subawardee's business or organization (the legal entity to which the DUNS number it provided belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?:

No

FFATA Report For Grants

Federal Award Identifier Number (FAIN): U01AI151797

Federal Agency ID: 7529

Is this information correct?: Yes

Federal Agency Name: NATIONAL INSTITUTES OF HEALTH

Prime Awardee DUNS #:077090066

Is this information correct?: Yes

DUNS Number +4:

Prime Awardee Name:ECOHEALTH ALLIANCE INC.

Prime Awardee Address:520 8TH AVE RM 1200
NEW YORK, New York
100184183

Prime Awardee Parent DUNS #: 077090066

Principal Place Of Performance(POP): NEW YORK, New York
100184183

CFDA Program Number(s): 93.855 Allergy and Infectious Diseases Research

Is this information correct?: Yes

Project Description: Understanding Risk of Zoonotic Virus Emergence in EID Hotspots of Southeast Asia - PROJECT SUMMARY/ABSTRACT Southeast Asia is one of the world's highest-risk EID hotspots, the origin of the SARS pandemic, Nipah virus, and repeated outbreaks of influenza. This is driven by high diversity of wildlife and rapidly expanding demography that brings human and wildlife populations closer. This proposal will launch the Emerging Infectious Diseases - South East Asia Research Collaboration Hub (EID-SEARCH), a collaboration among leaders in emerging disease research in the USA, Thailand, Singapore and the 3 major Malaysian administrative regions. These researchers have networks that span >50 clinics, laboratories and research institutions across almost all SE Asian countries and will use the EID-SEARCH as an early warning system for outbreaks involving exchange of information, reagents, samples and technology, and a collaborative power-house for fundamental and translational research. The EID-SEARCH will also act as a significant asset to scale-up and deploy resources in the case of an outbreak in the region. This EIDRC will conduct research to: 1) Identify, characterize and rank spillover risk of high zoonotic potential viruses from wildlife, by analyzing previously-archived wildlife samples, conducting targeted wildlife surveillance, and using serology & PCR assays to identify novel viruses. These will be characterized to assess risk of spillover to people, and a series of in vitro (receptor binding, cell culture) and in vivo (humanized mouse and collaborative cross models) assays used to assess their potential to infect people and cause disease; 2) Collect samples and questionnaire data from human communities that live in EID hotspots and have high cultural and behavioral risk of animal exposure (e.g. wildlife hunting, bat guano collection). These will be tested with serological assays to identify evidence of novel virus spillover, and analyzed against metadata to identify key risk pathways for transmission; 3) Identify and characterize viral etiology of "cryptic" outbreaks in clinical cohorts. We will conduct syndromic surveillance at clinics serving the populations in Aim 2, enroll patients with undiagnosed illness and symptoms consistent with emerging viral pathogens, and test samples with molecular and follow-up serological assays to identify causal links between these syndromes and novel viruses. This research will advance our understanding of the risk of novel viral emergence in a uniquely important region. It will also strengthen in-country research capacity by linking local infectious disease scientists with an international collaborative network that has proven capacity to conduct this work and produce significant findings. The large body of high impact collaborative research from this EIDRC leadership team provides proof-of-concept that EID-SEARCH has the background, collaborative network, experience, and skillset to act as a unique early warning system for novel EIDs of any etiology threatening to emerge in this hottest of the EID hotspots.

Is this information correct?: Yes

Total Federal Funding Amount: 3052312.00

Is this information correct?: Yes

Obligation/Action Date:June 17, 2020

Is this information correct?: Yes

Report Month:Feb 2021

In your business or organization's preceding completed fiscal year, did your business or organization (the legal entity to which this specific SAM record, represented by a DUNS number, belongs) receive (1) 80 percent or more of your annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$25,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?: Yes

Does the public have access to information about the compensation of the executives in your business or organization (the legal entity to which this specific SAM record, represented by a DUNS number, belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?: Yes

Subawardee Data

Subawardee Information: Subawardee DUNS:
Subawardee Name:

534409256
CONSERVATION MEDICINE LTD
LOT NO.20 LEVEL 1 LAZENDA COMMERCIAL CENTRE

Subawardee Address: **PHASE 3 JALAN OKK ABDULLAH
LABUAN, Non-US**

Amount of Subaward: **25000.00**

Subaward Obligation/Action Date: **February 28, 2021**

CFDA Program Number(s): **93.855 Allergy and Infectious Diseases Research**

Federal Agency ID: **7529**

Federal Agency Name: **NATIONAL INSTITUTES OF HEALTH**

Subaward Project Description: **Coordinate and conduct all field work and lab work in Malaysia including bat and rodent sampling at cave sites; sampling of high risk communities; syndromic surveillance; and characterization of novel paramyxoviruses and corona viruses; facilitate and coordinate training workshops and capacity building efforts at partner institutions; facilitate communication between prime and country collaborators; ensure all in-country permits and permissions are in place to conduct the work; work with in-country partners to identify archived samples to screen; prepare reports for stakeholders and collaborators; contribute to data analysis, manuscript preparation, and dissemination of results to stakeholders**

Subawardee Principal Place of Performance: **Labuan, Non-US**

Subaward Number: **1U01AI151797-01**

As provided to you by your subawardee, in your subawardee's business or organization's preceding completed fiscal year, did its business or organization (the legal entity to which the DUNS number it provided belongs) receive (1) 80 percent or more of its annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$30,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?: **No**

As provided to you by your subawardee, does the public have access to information about the compensation of the executives in the subawardee's business or organization (the legal entity to which the DUNS number it provided belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?: **No**

FFATA Report For Grants

Federal Award Identifier Number (FAIN): U01AI151797

Federal Agency ID: 7529

Is this information correct?: Yes

Federal Agency Name: NATIONAL INSTITUTES OF HEALTH

Prime Awardee Unique Entity ID (DUNS): 077090066

Is this information correct?: Yes

EFT Indicator:

Unique Entity ID (SAM): TKS7NBB4JDN6

Prime Awardee Name: ECOHEALTH ALLIANCE INC.

Prime Awardee Address: 520 8TH AVE RM 1200 NEW YORK, New York 100184183

Prime Awardee Parent Unique Entity ID (DUNS): 077090066

Parent Unique Entity ID (SAM): TKS7NBB4JDN6

Principal Place Of Performance (POP): NEW YORK, New York 100184183

CFDA Program Number(s): 93.855 Allergy and Infectious Diseases Research

Is this information correct?: Yes

Project Description: Understanding Risk of Zoonotic Virus Emergence in EID Hotspots of Southeast Asia - PROJECT SUMMARY/ABSTRACT Southeast Asia is one of the world's highest-risk EID hotspots, the origin of the SARS pandemic, Nipah virus, and repeated outbreaks of influenza. This is driven by high diversity of wildlife and rapidly expanding demography that brings human and wildlife populations closer. This proposal will launch the Emerging Infectious Diseases - South East Asia Research Collaboration Hub (EID-SEARCH), a collaboration among leaders in emerging disease research in the USA, Thailand, Singapore and the 3 major Malaysian administrative regions. These researchers have networks that span >50 clinics, laboratories and research institutions across almost all SE Asian countries and will use the EID-SEARCH as an early warning system for outbreaks involving exchange of information, reagents, samples and technology, and a collaborative power-house for fundamental and translational research. The EID-SEARCH will also act as a significant asset to scale-up and deploy resources in the case of an outbreak in the region. This EIDRC will conduct research to: 1) Identify, characterize and rank spillover risk of high zoonotic potential viruses from wildlife, by analyzing previously-archived wildlife samples, conducting targeted wildlife surveillance, and using serology & PCR assays to identify novel viruses. These will be characterized to assess risk of spillover to people, and a series of in vitro (receptor binding, cell culture) and in vivo (humanized mouse and collaborative cross models) assays used to assess their potential to infect people and cause disease; 2) Collect samples and questionnaire data from human communities that live in EID hotspots and have high cultural and behavioral risk of animal exposure (e.g. wildlife hunting, bat guano collection). These will be tested with serological assays to identify evidence of novel virus spillover, and analyzed against metadata to identify key risk pathways for transmission; 3) Identify and characterize viral etiology of 'cryptic' outbreaks in clinical cohorts. We will conduct syndromic surveillance at clinics serving the populations in Aim 2, enroll patients with undiagnosed illness and symptoms consistent with emerging viral pathogens, and test samples with molecular and follow-up serological assays to identify causal links between these syndromes and novel viruses. This research will advance our understanding of the risk of novel viral emergence in a uniquely important region. It will also strengthen in-country research capacity by linking local infectious disease scientists with an international collaborative network that has proven capacity to conduct this work and produce significant findings. The large body of high impact collaborative research from this EIDRC leadership team provides proof-of-concept that EID-SEARCH has the background, collaborative network, experience, and skillset to act as a unique early warning system for novel EIDs of any etiology threatening to emerge in this hottest of the EID hotspots.

Is this information correct?: Yes

Total Federal Funding Amount: 3052312.00

Is this information correct?: Yes

Obligation/Action Date: June 17, 2020

Is this information correct?: Yes

Report Month: Nov 2021

In your business or organization's preceding completed fiscal year, did your business or organization (the legal entity to which this specific SAM record, represented by a DUNS number, belongs) receive (1) 80 percent or more of your annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$25,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements? Yes

Does the public have access to information about the compensation of the executives in your business or organization (the legal entity to which this specific SAM record, represented by a DUNS number, belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986? Yes

Subawardee Data

Subawardee Data

| | | |
|--------------------------------|---|---|
| Subawardee Information: | Subawardee DUNS: | 659808836 |
| | Subcontractor Unique Entity ID (SAM): | L237QX57L1K7 |
| | Subawardee Name: | CHULALONGKORN UNIVERSITY |
| | Subawardee Doing Business As Name: | CU |
| | Subawardee Address: | 254 PHAYATHAI ROAD PATHUM WAN, Non-US |
| | Subawardee Parent Unique Entity ID (DUNS): | 660723081 |
| | Subcontractor Parent Unique Entity ID (SAM): | N5BJMUL9DNJ8 |
| | Amount of Subaward: | 25000.00 |
| | Subaward Obligation/Action Date: | November 30, 2021 |
| | CFDA Program Number(s): | 93.855 Allergy and Infectious Diseases Research |
| | Federal Agency ID: | 7529 |
| | Federal Agency Name: | NATIONAL INSTITUTES OF HEALTH Research to analyze previously-archived wildlife samples, conduct targeted wildlife surveillance, and use serology & PCR assays to identify, characterize and assess spillover risk of high zoonotic potential viruses from wildlife; conduct biological-behavioral surveillance among the at-risk communities and to identify evidence of novel virus spillover and key risk pathways for transmission; conduct syndromic surveillance among clinical patients with undiagnosed illness and symptoms consistent with emerging viral pathogens to identify and characterize viral etiology of "cryptic" outbreaks. |
| | Subaward Project Description: | |
| | Subawardee Principal Place of Performance: | PATHUM WAN, Non-US |
| | Subaward Number: | 1U01AI151797-01 |
| | As provided to you by your subawardee, in your subawardee's business or organization's preceding completed fiscal year, did its business or organization (the legal entity to which the Unique Entity ID (DUNS) it provided belongs) receive (1) 80 percent or more of its annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$30,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?: | No |
| | As provided to you by your subawardee, does the public have access to information about the compensation of the executives in the subawardee's business or organization (the legal entity to which the Unique Entity ID (DUNS) it provided belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?: | No |



FFATA reports

Tuesday, March 15, 2022 | 4:34 pm |

U01AI151797

Review FFATA Report

FFATA Report For Grants

1. Federal Award Identifier Number (FAIN):
U01AI151797

2. Federal Agency ID:
7529

a. Is this information correct?:
Yes

3. Federal Agency Name:
NATIONAL INSTITUTES OF HEALTH

4. Prime Awardee Unique Entity ID (DUNS):
077090066

a. Is this information correct?:
Yes

5. EFT Indicator:

6. Unique Entity ID (SAM):
TKS7NBB4JDN6

7. Prime Awardee Name:
ECOHEALTH ALLIANCE INC.

8. Prime Awardee Address:

Street Address:
520 8TH AVE RM 1200

City:

Report History

Mar 13, 2022 9:03 am
Report Submitted

[Reopen to Edit Report](#)

Progress

- ✓ FFATA Details
- ✓ Federal Award Identifier Number (FAIN)
- ✓ Federal Agency ID
- ✓ Federal Agency Name
- ✓ Awardee Unique Entity ID (DUNS)
- ✓ EFT Indicator
- ✓ Unique Entity ID (SAM)
- ✓ Awardee Name
- ✓ Awardee Doing Business As Name
- ✓ Awardee Address
- ✓ Awardee Parent Unique Entity ID (DUNS)
- ✓ Parent Unique Entity ID (SAM)
- ✓ Principal Place Of Performance(POP)
- ✓ CFDA Program Number(s)
- ✓ Project Description
- ✓ Total Federal Funding Amount
- ✓ Obligation/Action Date
- ✓ Report Month
- ✓ In your business or organization's preceding completed fiscal year, did your business or organization (the legal entity to which this specific SAM record, represented by a Unique Entity ID (DUNS), belongs) receive (1) 80 percent or more of your annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$30,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts,

NEW YORK

State (All U.S. Territories are available under the State drop down):
New York

Country:
United States

Zip+4:
100184183

Congressional District:
12

9. Prime Awardee Parent Unique Entity ID (DUNS):
077090066

10. Parent Unique Entity ID (SAM):
TKS7NBB4JDN6

11. Principal Place Of Performance(POP):

City:
NEW YORK

Is this information correct?:
Yes

State (All U.S. Territories are available under the State drop down):
New York

Country:
United States

Is this information correct?:
Yes

Zip+4:
100184183

Congressional District:
12

loans, grants, subgrants, and/or cooperative agreements?

- ✓ Does the public have access to information about the compensation of the executives in your business or organization (the legal entity to which this specific SAM record, represented by a Unique Entity ID (DUNS), belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?

Subawardee Information

- ✓ Subawardee DUNS
- ✓ EFT Indicator
- ✓ Subcontractor Unique Entity ID (SAM)
- ✓ Subawardee Name
- ✓ Subawardee Doing Business As Name
- ✗ Subawardee Address
- ✓ Subawardee Parent Unique Entity ID (DUNS)
- ✓ Subcontractor Parent Unique Entity ID (SAM)
- ✓ Amount of Subaward
- ✓ Subaward Obligation/Action Date
- ✓ CFDA Program Number(s)
- ✓ Federal Agency ID
- ✓ Federal Agency Name
- ✗ Subawardee Principal Place of Performance
- ✓ Subaward Number
- ✓ As provided to you by your subawardee, in your subawardee's business or organization's preceding completed fiscal year, did its business or organization (the legal entity to which the Unique Entity ID (DUNS) it provided belongs) receive (1) 80 percent or more of its annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$30,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?
- ✓ As provided to you by your subawardee, does the public have access to information about the compensation of the executives in the subawardee's business or organization (the legal entity to which the Unique Entity ID (DUNS) it provided belongs) through periodic reports filed under section 13(a) or

12. CFDA Program Number(s):

93.855 Allergy and Infectious Diseases Research

a. Is this information correct?:

Yes

13. Project Description:

Understanding Risk of Zoonotic Virus Emergence in EID Hotspots of Southeast Asia - PROJECT SUMMARY/ABSTRACT Southeast Asia is one of the world's highest-risk EID hotspots, the origin of the SARS pandemic, Nipah virus, and repeated outbreaks of influenza. This is driven by high diversity of wildlife and rapidly expanding demography that brings human and wildlife populations closer. This proposal will launch the Emerging Infectious Diseases - South East Asia Research Collaboration Hub (EID-SEARCH), a collaboration among leaders in emerging disease research in the USA, Thailand, Singapore and the 3 major Malaysian administrative regions. These researchers have networks that span >50 clinics, laboratories and research institutions across almost all SE Asian countries and will use the EID-SEARCH as an early warning system for outbreaks involving exchange of information, reagents, samples and technology, and a collaborative powerhouse for fundamental and translational research. The EID-SEARCH will also act as a significant asset to scale-up and deploy resources in the case of an outbreak in the region. This EIDRC will conduct research to: 1) Identify, characterize and rank spillover risk of high zoonotic potential viruses from wildlife, by analyzing previously-archived wildlife samples, conducting targeted wildlife surveillance, and using serology & PCR assays to identify novel viruses. These will be characterized to assess risk of spillover to people, and a series of in vitro (receptor binding, cell culture) and in vivo (humanized mouse and collaborative cross models) assays used to assess their potential to infect people and cause disease; 2) Collect samples and questionnaire data from human communities that live in EID hotspots and have high cultural and behavioral risk of animal exposure (e.g. wildlife hunting, bat guano collection). These will be tested with serological assays to identify evidence of novel virus spillover, and analyzed against metadata to identify key risk pathways for transmission; 3) Identify and characterize viral etiology of 'cryptic' outbreaks in clinical cohorts. We will conduct syndromic surveillance at clinics serving the populations in Aim 2, enroll patients with undiagnosed illness and symptoms consistent with emerging viral pathogens, and test samples with molecular and follow-up serological assays to identify causal links between these syndromes and novel viruses. This research will advance our understanding of the risk of novel viral emergence in a uniquely important region. It will also strengthen in-country research capacity by linking local infectious disease scientists with an international collaborative network that has proven capacity to conduct this work and produce significant findings. The large body of high impact collaborative research from this EIDRC leadership team provides proof-of-concept that EID-SEARCH has the background, collaborative network, experience, and skillset to act as a unique early warning system for novel EIDs of any etiology threatening to emerge in this hottest of the EID hotspots.

a. Is this information correct?:

Yes

14. Total Federal Funding Amount:

3052312.00

15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?

- ✓ Subawardee Data
 - ✓ Federal Award Identifier Number (FAIN)
 - ✓ Federal Agency ID
 - ✓ Federal Agency Name
 - ✓ Awardee Unique Entity ID (DUNS)
 - ✓ EFT Indicator
 - ✓ Unique Entity ID (SAM)
 - ✓ Awardee Name
 - ✓ Awardee Doing Business As Name
 - ✓ Awardee Address
 - ✓ Awardee Parent Unique Entity ID (DUNS)
 - ✓ Parent Unique Entity ID (SAM)
 - ✓ Principal Place Of Performance (POP)
 - ✓ CFDA Program Number(s)
 - ✓ Project Description
 - ✓ Total Federal Funding Amount
 - ✓ Obligation/Action Date
 - ✓ Report Month

organization's preceding completed fiscal year, did your business or organization (the legal entity to which this specific SAM record, represented by a Unique Entity ID (DUNS), belongs) receive (1) 80 percent or more of your annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$30,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?

- ✓ Does the public have access to information about the compensation of the executives in your business or organization (the legal entity to which this specific SAM record, represented by a Unique Entity ID (DUNS), belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?

Subawardee Information

- ✓ Subawardee DUNS
- ✓ EFT Indicator
- ✓ Subcontractor Unique Entity ID (SAM)
- ✓ Subawardee Name

a. Is this information correct?:

Yes

15. Obligation/Action Date:

June 17, 2020

a. Is this information correct?:

Yes

16. Report Month:

Dec 2021

In order to determine whether you are required to report executive compensation data, answer the following question(s)

17. In your business or organization's preceding completed fiscal year, did your business or organization (the legal entity to which this specific SAM record, represented by a DUNS number, belongs) receive (1) 80 percent or more of your annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$25,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?:

Yes

18. Does the public have access to information about the compensation of the executives in your business or organization (the legal entity to which this specific SAM record, represented by a DUNS number, belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?:

Yes

- Subawardee Doing Business As Name
- Subawardee Address
- Subawardee Parent Unique Entity ID (DUNS)
- Subcontractor Parent Unique Entity ID (SAM)
- Amount of Subaward
- Subaward Obligation/Action Date
- CFDA Program Number(s)
- Federal Agency ID
- Federal Agency Name
- Subawardee Principal Place of Performance
- Subaward Number
- As provided to you by your subawardee, in your subawardee's business or organization's preceding completed fiscal year, did its business or organization (the legal entity to which the Unique Entity ID (DUNS) it provided belongs) receive (1) 80 percent or more of its annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$30,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?
- As provided to you by your subawardee, does the public have access to information about the compensation of the executives in the subawardee's business or organization (the legal entity to which the Unique Entity ID (DUNS) it provided belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?
- ARRA
- Federal Award Identifier Number (FAIN)
- Federal Agency ID
- Federal Agency Name
- Awardee Unique Entity ID (DUNS)
- EFT Indicator
- Unique Entity ID (SAM)
- Awardee Name
- Awardee Doing Business As Name
- Awardee Address
- Awardee Parent Unique Entity ID (DUNS)
- Parent Unique Entity ID (SAM)

Subawardee Data

1. Subawardee Information:

Subawardee DUNS:

534409256

Subcontractor Unique Entity ID (SAM):

XKAJBKBNJLV7

Subawardee Name:

CONSERVATION MEDICINE LTD

Subawardee Doing Business As Name:

Conservation Medicine

Subawardee Address:

Street Address:
 LOT NO.20, LEVEL 1, LAZENDA COMMERCIAL CENTRE, PHASE 3, JALAN OKK ABDULLAH

City:
 LABUAN FEDERAL TERRITORY

State (All U.S. Territories are available under the State drop down):
 Non-US

Country:
 Malaysia

Zip+4:

Amount of Subaward:
 77162.72

Subaward Obligation/Action Date:
 December 31, 2021

CFDA Program Number(s):
 93.855 Allergy and Infectious Diseases Research

Federal Agency ID:
 7529

Federal Agency Name:
 NATIONAL INSTITUTES OF HEALTH

Subaward Project Description:
 Coordinate and conduct all field work and lab work in Malaysia including bat and rodent sampling at cave sites; sampling of high risk communities; syndromic surveillance; and characterization of novel paramyxoviruses and corona viruses; facilitate and coordinate training workshops and capacity building efforts at partner institutions; facilitate communication between prime and country collaborators;

- ✓ Principal Place Of Performance(POP)
 - ✓ CFDA Program Number(s)
 - ✓ Project Description
 - ✓ Total Federal Funding Amount
 - ✓ Obligation/Action Date
 - ✓ Report Month
 - ✓ In your business or organization's preceding completed fiscal year, did your business or organization (the legal entity to which this specific SAM record, represented by a Unique Entity ID (DUNS), belongs) receive (1) 80 percent or more of your annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$30,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?
 - ✓ Does the public have access to information about the compensation of the executives in your business or organization (the legal entity to which this specific SAM record, represented by a Unique Entity ID (DUNS), belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?
- Subawardee Information
- ✓ Subawardee DUNS
 - ✓ EFT Indicator
 - ✓ Subcontractor Unique Entity ID (SAM)
 - ✓ Subawardee Name
 - ✓ Subawardee Doing Business As Name
 - ✗ Subawardee Address
 - ✓ Subawardee Parent Unique Entity ID (DUNS)
 - ✓ Subcontractor Parent Unique Entity ID (SAM)
 - ✓ Amount of Subaward
 - ✓ Subaward Obligation/Action Date
 - ✓ CFDA Program Number(s)
 - ✓ Federal Agency ID
 - ✓ Federal Agency Name
 - ✗ Subawardee Principal Place of Performance
 - ✓ Subaward Number
 - ✓ As provided to you by your subawardee, in your subawardee's business or organization's preceding completed fiscal year, did its business

ensure all in-country permits and permissions are in place to conduct the work; work with in-country partners to identify archived samples to screen; prepare reports for stakeholders and collaborators; contribute to data analysis, manuscript preparation, and dissemination of results to stakeholders

Subawardee Principal Place of Performance:

| |
|---|
| <p>City: Labuan</p> <p>State (All U.S. Territories are available under the State drop down): Non-US</p> <p>Country: Malaysia</p> |
|---|

Subaward Number:

1U01A1151797-01

In order to determine whether you are required to report executive compensation data, answer the following question(s)

As provided to you by your subawardee, in your subawardee's business or organization's preceding completed fiscal year, did its business or organization (the legal entity to which the Unique Entity ID (DUNS) it provided belongs) receive (1) 80 percent or more of its annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$30,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?:
No

or organization (the legal entity to which the Unique Entity ID (DUNS) it provided belongs) receive (1) 80 percent or more of its annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$30,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?

✔ As provided to you by your subawardee, does the public have access to information about the compensation of the executives in the subawardee's business or organization (the legal entity to which the Unique Entity ID (DUNS) it provided belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?

Tips

Clicking 'Save' or 'Save and Continue,' will save your report in draft (DRT) and allow you to leave and continue your report later.

Click 'Save and Continue' to save information on the current page and go to the next page of the form.

Click 'Save' if you want to save and stay on the current page.

Click 'Cancel' to leave and continue your report later from the point you last saved. If you have not yet saved the report, clicking cancel will simply return to the reports list.

If you receive an error notification: You can ignore errors and save your current information. You will be required to resolve all invalid form fields before you can review and submit your report.

Quickly skip to any page by clicking the steps in the left column.

[FFATA Grants Data Definitions](#)



FFATA reports

Thursday, April 14, 2022 | 9:08 am |

U01AI151797

Prime Award Details

Note: Some fields have been pre-populated from data in FAADS+ and SAM; please review the report to identify and complete required fields that have not been pre-populated. For specific data sources by data element, consult the data dictionary found in the Tips section.

FFATA Report For Grants

1. Federal Award Identifier Number (FAIN):

U01AI151797

2. Federal Agency ID:

7529

a. Is this information correct?:

Yes

3. Federal Agency Name:

NATIONAL INSTITUTES OF HEALTH

4. Prime Awardee Unique Entity ID (SAM):

TKS7NBB4JDN6

5. EFT Indicator:

6. Prime Awardee Name:

ECOHEALTH ALLIANCE INC.

7. Prime Awardee Address:

Street Address:

520 8TH AVE RM 1200

City:

Report History

Apr 14, 2022 9:07 am

Report Submitted

[Reopen to Edit Report](#)

Progress

- ✓ FFATA Details
- ✓ Federal Award Identifier Number (FAIN)
- ✓ Federal Agency ID
- ✓ Federal Agency Name
- ✓ Awardee Unique Entity ID (SAM)
- ✓ EFT Indicator
- ✓ Awardee Name
- ✓ Awardee Doing Business As Name
- ✓ Awardee Address
- ✓ Awardee Parent Unique Entity ID (SAM)
- ✓ Principal Place Of Performance(POP)
- ✓ CFDA Program Number(s)
- ✓ Project Description
- ✓ Total Federal Funding Amount
- ✓ Obligation/Action Date
- ✓ Report Month
- ✓ In your business or organization's preceding completed fiscal year, did your business or organization (the legal entity to which this specific SAM record, represented by a Unique Entity ID (SAM), belongs) receive (1) 80 percent or more of your annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$30,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?
- ✓ Does the public have access to

NEW YORK

State (All U.S. Territories are available under the State drop down):

New York

Country:

United States

Zip+4:

100184183

Congressional District:

12

information about the compensation of the executives in your business or organization (the legal entity to which this specific SAM record, represented by a Unique Entity ID (SAM), belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?

Tips

Clicking 'Save' or 'Save and Continue,' will save your report in draft (DRT) and allow you to leave and continue your report later.

Click 'Save and Continue' to save information on the current page and go to the next page of the form.

Click 'Save' if you want to save and stay on the current page.

Click 'Cancel' to leave and continue your report later from the point you last saved. If you have not yet saved the report, clicking cancel will simply return to the reports list.

If you receive an error notification: You can ignore errors and save your current information. You will be required to resolve all invalid form fields before you can review and submit your report.

Quickly skip to any page by clicking the steps in the left column.

[FFATA Grants Data Definitions](#)

8. Prime Awardee Parent Unique Entity ID (SAM):

TKS7NBB4JDN6

9. Principal Place Of Performance(POP):

City:

NEW YORK

Is this information correct?:

Yes

State (All U.S. Territories are available under the State drop down):

New York

Country:

United States

Is this information correct?:

Yes

Zip+4:

100184183

Congressional District:

12

10. CFDA Program Number(s):

93.855 Allergy and Infectious Diseases Research

a. Is this information correct?:Yes

11. Project Description:

Understanding Risk of Zoonotic Virus Emergence in EID Hotspots of Southeast Asia - PROJECT SUMMARY/ABSTRACT Southeast Asia is one of the world's highest-risk EID hotspots, the origin of the SARS pandemic, Nipah virus, and repeated outbreaks of influenza. This is driven by high diversity of wildlife and rapidly expanding demography that brings human and wildlife populations closer. This proposal will launch the Emerging Infectious Diseases - South East Asia Research Collaboration Hub (EID-SEARCH), a collaboration among leaders in emerging disease research in the USA, Thailand, Singapore and the 3 major Malaysian administrative regions. These researchers have networks that span >50 clinics, laboratories and research institutions across almost all SE Asian countries and will use the EID-SEARCH as an early warning system for outbreaks involving exchange of information, reagents, samples and technology, and a collaborative powerhouse for fundamental and translational research. The EID-SEARCH will also act as a significant asset to scale-up and deploy resources in the case of an outbreak in the region. This EIDRC will conduct research to: 1) Identify, characterize and rank spillover risk of high zoonotic potential viruses from wildlife, by analyzing previously-archived wildlife samples, conducting targeted wildlife surveillance, and using serology & PCR assays to identify novel viruses. These will be characterized to assess risk of spillover to people, and a series of in vitro (receptor binding, cell culture) and in vivo (humanized mouse and collaborative cross models) assays used to assess their potential to infect people and cause disease; 2) Collect samples and questionnaire data from human communities that live in EID hotspots and have high cultural and behavioral risk of animal exposure (e.g. wildlife hunting, bat guano collection). These will be tested with serological assays to identify evidence of novel virus spillover, and analyzed against metadata to identify key risk pathways for transmission; 3) Identify and characterize viral etiology of 'cryptic' outbreaks in clinical cohorts. We will conduct syndromic surveillance at clinics serving the populations in Aim 2, enroll patients with undiagnosed illness and symptoms consistent with emerging viral pathogens, and test samples with molecular and follow-up serological assays to identify causal links between these syndromes and novel viruses. This research will advance our understanding of the risk of novel viral emergence in a uniquely important region. It will also strengthen in-country research capacity by linking local infectious disease scientists with an international collaborative network that has proven capacity to conduct this work and produce significant findings. The large body of high impact collaborative research from this EIDRC leadership team provides proof-of-concept that EID-SEARCH has the background, collaborative network, experience, and skillset to act as a unique early warning system for novel EIDs of any etiology threatening to emerge in this hottest of the EID hotspots.

a. Is this information correct?:Yes

12. Total Federal Funding Amount:

3052312.00

a. Is this information correct?:Yes

13. Obligation/Action Date:

June 17, 2020

a. Is this information correct?:

Yes

14. Report Month:

Jan 2022

In order to determine whether you are required to report executive compensation data, answer the following question(s)

15. In your business or organization's preceding completed fiscal year, did your business or organization (the legal entity to which this specific SAM record, represented by a UEI number, belongs) receive (1) 80 percent or more of your annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (2) \$25,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?:

Yes

16. Does the public have access to information about the compensation of the executives in your business or organization (the legal entity to which this specific SAM record, represented by a UEI number, belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?:

Yes



EcoHealth Alliance

CONTRACT AGREEMENT AMENDMENT

NAME: Conservation Medicine Ltd

ADDRESS: Unit 13H Villamas, Jalan Villamas, Sungai Buloh, 47000, Selangor, Malaysia

PROJECT TITLE Understanding Risk of Zoonotic Virus Emergence in EID Hotspots of Southeast Asia

PERIOD 01 June 2021 – 31 May 2022

PHONE: +60.19.392.8307

EMAIL: (b) (6)

FUNDING SOURCE: NIH/NIAID/CREID/07-049-7012-52338

UNIQUE ENTITY IDENTIFIER: XKAJBKBNJLV7

AGREEMENT AMOUNT: \$224,998.15

EFFECTIVE DATE OF AMENDMENT: 20 April 2022

Amendments to the Original Terms & Conditions:

Item 1 - Add NIH Grants Policy item to “Section II. CONDITIONS OF THE AGREEMENT” as follows:

7. NIH Grants Policy: As applicable and if they correspond with Malaysian Law, Conservation Medicine Ltd will adhere to all NIH Grants Policy Statement Public Policy Requirements and Objectives (https://grants.nih.gov/grants/policy/nihgps/HTML5/section_4/4.1_public_policy_requirements_and_objectives.htm), including submission of applicable assurances and certifications if available (see Public Policy Requirements, Objectives, and Other Appropriation Mandates).

Item 2- Add to results sharing item to “Section VI. CONFIDENTIALITY; PROPRIETARY INFORMATION AND DATA” the following sentence:

Unless prohibited by Malaysian law, the Malaysian government, Malaysian ministries or government departments, or any other applicable restrictions, Conservation Medicine Ltd agrees to work with EcoHealth Alliance to ensure the results and accomplishments of the activities funded by this project may be available to the research community and to the public at large.

Item 3 – In Section “X. SUBCONTRACTOR’S FINANCIAL RESPONSIBILITIES” replace first paragraph of the original text:

As applicable, Conservation Medicine Ltd agrees to adhere to all requirements contained in OMB Circular A-122 during the term of the agreement. Conservation Medicine Ltd acknowledges responsibility for A-

133 Federal Audit requirements for funds received under this agreement and will provide EcoHealth Alliance a copy of their most current A-133 or similar audit report as may be provided. Conservation Medicine Ltd agrees that all overhead charged to this grant shall not exceed the amount permitted by the applicable or de minimus federal indirect cost rate in effect during the performance period. Conservation Medicine Ltd shall provide EcoHealth Alliance if applicable with a copy of their most current federal indirect cost rate agreement. If requested, Conservation Medicine Ltd will provide EcoHealth Alliance with a copy of a most current audit report. Conservation Medicine Ltd agrees to keep systematic records of all expenditures relating to this agreement. A quarterly financial report is required along with a signed invoice for services and reimbursement of expenses. Documentation of expenses, consisting of bills, invoices, receipts, logbooks (acceptable only for gasoline for cars and boats), etc., must be retained by Conservation Medicine Ltd for five (5) years after the close of the agreement period and must be available for inspection by representatives of EcoHealth Alliance at any time during this period. EcoHealth Alliance may, at its own expense, examine, audit, or have audited the records of Conservation Medicine Ltd insofar as they relate to activities supported by this agreement.

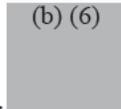
With the following, new text:

As applicable, Conservation Medicine Ltd agrees to adhere to all applicable requirements contained in 2 CFR 200 (Uniform Administrative requirements, Cost Principles, and Audit Requirements for Federal Awards) and 45 CFR 75 (Uniform Administrative Requirements, Cost Principles, and Audit Requirements for HHS Awards) during the term of the agreement. Conservation Medicine Ltd acknowledges responsibility for all applicable CFR requirements for funds received under this agreement and will provide EcoHealth Alliance a copy of their most current audit report as may be provided. Conservation Medicine Ltd agrees that all overhead charged to this grant shall not exceed the amount permitted by the applicable or de minimis federal indirect cost rate in effect during the performance period. Conservation Medicine Ltd shall provide EcoHealth Alliance if applicable with a copy of their most current federal indirect cost rate agreement. If requested, Conservation Medicine Ltd will provide EcoHealth Alliance with a copy of a most current audit report. Conservation Medicine Ltd agrees to keep systematic records of all expenditures relating to this agreement. Financial report are required along with a signed invoices for services and reimbursement of expenses. Documentation of expenses, consisting of bills, invoices, receipts, logbooks (acceptable only for gasoline for cars and boats), etc., must be retained by Conservation Medicine Ltd for five (5) years after the close of the agreement period and must be available for inspection by representatives of EcoHealth Alliance and its auditors at any time during this period. EcoHealth Alliance may, at its own expense, examine, audit, or have audited the records of Conservation Medicine Ltd insofar as they relate to activities supported by this agreement and as necessary for EcoHealth Alliance to meet the requirements under 45 CFR 75.

Item 4 – All other terms and conditions remain unchanged and in full force and effect.

 (b) (6)

Dr. Pe
President, EcoHealth Alliance

 (b) (6)

Thomas Hughes
Director, Conservation Medicine Ltd.

29.04.22
DATE

29.4.22
DATE



CONTRACT AGREEMENT AMENDMENT

NAME: Emerging Infectious Diseases Clinical Center, Chulalongkorn University

ADDRESS: Rama IV Road, Bangkok, 10330 Thailand

PROJECT TITLE: Understanding Risk of Zoonotic Virus Emergence in EID Hotspots of Southeast Asia

PERIOD: 1 June 2021 – 31 May 2022

PHONE: +962 2 720 1000

EMAIL: (b) (6)

FUNDING SOURCE: NIH/NIAID/CREID/07-049-7012-52338

UNIQUE ENTITY IDENTIFIER: KZGWU4FU9UK5

AGREEMENT AMOUNT: \$215,944.56

EFFECTIVE DATE OF AMENDMENT 21 April 2022

Amendments to the Original Terms & Conditions:

Item 1- This is an amendment based on the Amendment 3 for the EID-SEARCH Year 2 project work during 01 June 2021 – 31 May 2022

Item 2 - Add NIH Grants Policy item to “Section II. CONDITIONS OF THE AGREEMENT” as follows:

7. NIH Grants Policy: As applicable, Chulalongkorn University will adhere to all NIH Grants Policy Statement Public Policy Requirements and Objectives (https://grants.nih.gov/grants/policy/nihgps/HTML5/section_4/4.1_public_policy_requirements_and_objectives.htm), including submission of applicable assurances and certifications (see Public Policy Requirements, Objectives, and Other Appropriation Mandates).

Item 3- Add results sharing item to “Section VII. PUBLICATION REVIEW AND APPROVAL” the following sentence:

Unless prohibited by law or any other applicable restrictions, Chulalongkorn University agrees to work with EcoHealth Alliance to ensure the results and accomplishments of the activities funded by this project may be available to the research community and to the public at large.

Item 4 – In Section “X. SUBCONTRACTOR’S FINANCIAL RESPONSIBILITIES” replace first paragraph of the original text:

As applicable, Chulalongkorn University agrees to adhere to all requirements contained in OMB Circular A-122 during the term of the agreement. Chulalongkorn University acknowledges responsibility for A-133 Federal Audit requirements for funds received under this agreement and will provide EcoHealth Alliance a copy of their most current A-133 or similar audit report as may be provided. Chulalongkorn University agrees that all overhead charged to this grant shall not exceed the amount permitted by the federal indirect cost rate in effect during the performance period.

Chulalongkorn University shall provide EcoHealth Alliance with a copy of their most current federal indirect cost rate agreement. If requested, Chulalongkorn University will provide EcoHealth Alliance with a copy of a most current audit report. Chulalongkorn University agrees to keep systematic records of all expenditures relating to this agreement. A quarterly financial report is required along with a signed invoice for services and reimbursement of expenses. Documentation of expenses, consisting of bills, invoices, receipts, logbooks (acceptable only for gasoline for cars and boats), etc., must be retained by Chulalongkorn University for five (5) years after the close of the agreement period and must be available for inspection by representatives of EcoHealth Alliance at a mutually agreeable time during this period. EcoHealth Alliance may, at its own expense, examine, audit, or have audited the records of Chulalongkorn University insofar as they relate to activities supported by this agreement.

With the following, new text:

As applicable, Chulalongkorn University agrees to adhere to all requirements contained in 2 CFR 200 (Uniform Administrative requirements, Cost Principles, and Audit Requirements for Federal Awards) and 45 CFR 75 (Uniform Administrative Requirements, Cost Principles, and Audit Requirements for HHS Awards) during the term of the agreement. Chulalongkorn University acknowledges responsibility for all applicable CFR requirements for funds received under this agreement and will provide EcoHealth Alliance a copy of their most current A-133 or similar audit report as may be provided. Chulalongkorn University agrees that all overhead charged to this grant shall not exceed the amount permitted by the federal indirect cost rate in effect during the performance period. Chulalongkorn University shall provide EcoHealth Alliance with a copy of their most current federal indirect cost rate agreement. If requested, Chulalongkorn University will provide EcoHealth Alliance with a copy of a most current audit report. Chulalongkorn University agrees to keep systematic records of all expenditures relating to this agreement. Financial report is required along with a signed invoice for services and reimbursement of expenses. Documentation of expenses, consisting of bills, invoices, receipts, logbooks (acceptable only for gasoline for cars and boats), etc., must be retained by Chulalongkorn University for five (5) years after the close of the agreement period and must be available for inspection by representatives of EcoHealth Alliance and its auditors at a mutually agreeable time during this period. EcoHealth Alliance may, at its own expense, examine, audit, or have audited the records of Chulalongkorn University insofar as they relate to activities supported by this agreement and as necessary for EcoHealth Alliance to meet the requirements under 45 CFR 75.

Item 5 – All other terms and conditions remain unchanged and in full force and effect.

(b) (6)

—
Dr. Peter Daszak, President
EcoHealth Alliance

04/28//2022

Date

I acknowledge that I have received and retained a copy of this agreement. By signing this agreement, I acknowledge that I have read and understood all of the terms and conditions herein. I also acknowledge that all of the terms and conditions set forth herein are acceptable to me, and I agree to be bound by them.

(b) (6)

—
Supichai Tangjaitrong, Ph.D
Managing Director
Chula Unisearch, Chulalongkorn UniversityGrants
Manager & Team Lead, Chulalongkorn University



27 April 2022

Date



CONTRACT AGREEMENT AMENDMENT

NAME: The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc.

ADDRESS: 6720-A Rockledge Drive, Suite 100, Bethesda, Maryland, 20817

PROJECT TITLE: Understanding Risk of Zoonotic Virus Emergence in EID Hotspots of Southeast Asia

PERIOD: 17 June 2020 – 31 May 2021

PHONE: +1.240.694.4040

EMAIL: (b) (6)

FUNDING SOURCE: NIH/NIAID/CREID/07-049-7012-52338

UNIQUE ENTITY IDENTIFIER: UYLBRENAPG5

AGREEMENT AMOUNT: \$114,372.02

EFFECTIVE DATE OF AMENDMENT 20 April 2022

Amendments to the Original Terms & Conditions:

Item 1 - Add NIH Grants Policy item to “Section II. CONDITIONS OF THE AGREEMENT” as follows:

7. NIH Grants Policy: As applicable, the Henry M. Jackson Foundation for the Advancement of Military Medicine will adhere to all NIH Grants Policy Statement Public Policy Requirements and Objectives (https://grants.nih.gov/grants/policy/nihgps/HTML5/section_4/4.1_public_policy_requirements_and_objectives.htm), including submission of applicable assurances and certifications (see Public Policy Requirements, Objectives, and Other Appropriation Mandates).

Item 2- Add to results sharing item to “Section VII. PUBLICATION REVIEW AND APPROVAL” the following sentence:

Unless prohibited by law or any other applicable restrictions, the Henry M. Jackson Foundation for the Advancement of Military Medicine agrees to work with EcoHealth Alliance to ensure the results and accomplishments of the activities funded by this project may be available to the research community and to the public at large.

Item 3 – In Section “X. SUBCONTRACTOR’S FINANCIAL RESPONSIBILITIES” replace first paragraph of the original text:

As applicable, The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. agrees to adhere to all requirements contained in OMB Circular A-122 during the term of the agreement. The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. acknowledges responsibility for A-

133 Federal Audit requirements for funds received under this agreement and will provide EcoHealth Alliance a copy of their most current A-133 or similar audit report as may be provided. The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. agrees that all overhead charged to this grant shall not exceed the amount permitted by the federal indirect cost rate in effect during the performance period. The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. shall provide EcoHealth Alliance with a copy of their most current federal indirect cost rate agreement. If requested, The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. will provide EcoHealth Alliance with a copy of a most current audit report. The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. agrees to keep systematic records of all expenditures relating to this agreement. A quarterly financial report is required along with a signed invoice for services and reimbursement of expenses. Documentation of expenses, consisting of bills, invoices, receipts, logbooks (acceptable only for gasoline for cars and boats), etc., must be retained by The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. for five (5) years after the close of the agreement period and must be available for inspection by representatives of EcoHealth Alliance at a mutually agreeable time during this period. EcoHealth Alliance may, at its own expense, examine, audit, or have audited the records of The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. insofar as they relate to activities supported by this agreement.

With the following, new text:

As applicable, The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. agrees to adhere to all requirements contained in 2 CFR 200 (Uniform Administrative requirements, Cost Principles, and Audit Requirements for Federal Awards) and 45 CFR 75 (Uniform Administrative Requirements, Cost Principles, and Audit Requirements for HHS Awards) during the term of the agreement. The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. acknowledges responsibility for all applicable CFR requirements for funds received under this agreement and will provide EcoHealth Alliance a copy of their most current A-133 or similar audit report as may be provided. The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. agrees that all overhead charged to this grant shall not exceed the amount permitted by the federal indirect cost rate in effect during the performance period. The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. shall provide EcoHealth Alliance with a copy of their most current federal indirect cost rate agreement. If requested, The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. will provide EcoHealth Alliance with a copy of a most current audit report. The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. agrees to keep systematic records of all expenditures relating to this agreement. Financial report is required along with a signed invoice for services and reimbursement of expenses. Documentation of expenses, consisting of bills, invoices, receipts, logbooks (acceptable only for gasoline for cars and boats), etc., must be retained by The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. for five (5) years after the close of the agreement period and must be available for inspection by representatives of EcoHealth Alliance and its auditors at a mutually agreeable time during this period. EcoHealth Alliance may, at its own expense, examine, audit, or have audited the records of The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. insofar as they relate to activities supported by this agreement and as necessary for EcoHealth Alliance to meet the requirements under 45 CFR 75.

Item 4 – All other terms and conditions remain unchanged and in full force and effect.

(b) (6)

April 28, 2022

Dr. Peter Daszak, President
EcoHealth Alliance

Date

I acknowledge that I have received and retained a copy of this agreement. By signing this agreement, I acknowledge that I have read and understood all of the terms and conditions herein. I also acknowledge that all of the terms and conditions set forth herein are acceptable to me, and I agree to be bound by them.

Yongkang
Qiu

Digitally signed by Yongkang Qiu
DN: dc=org, dc=hjf, dc=ad, ou=HQ,
ou=Users, ou=Research Administration,
ou=OSP, cn=Yongkang Qiu,
email=(b) (6)
Date: 2022.04.27 21:48:48 -04'00'

Yongkang Qiu
Grants Manager
Research Administration
The Henry M. Jackson Foundation for the
Advancement of Military Medicine, Inc.

Date



CONTRACT AGREEMENT AMENDMENT

NAME: The University of North Carolina at Chapel Hill

ADDRESS: 104 Airport Dr Suite 2200
Campus Box 1350
Chapel Hill, NC 27599-1350

PROJECT TITLE Understanding Risk of Zoonotic Virus Emergence in EID Hotspots of Southeast Asia

PERIOD 17 June 2020 – 31 May 2021

PHONE: +1.919.966.3895

EMAIL: ResAdminOSR@unc.edu

FUNDING SOURCE: NIH/NIAID/CREID/07-049-7012-52338

UNIQUE ENTITY IDENTIFIER: D3LHU66KBLD5

AGREEMENT AMOUNT: \$194,375.00

EFFECTIVE DATE OF AMENDMENT 21 April 2022

Amendments to the Original Terms & Conditions:

Item 1 - Add NIH Grants Policy item to “Section II. CONDITIONS OF THE AGREEMENT” as follows:

7. NIH Grants Policy: As applicable, the University of North Carolina at Chapel Hill will adhere to all NIH Grants Policy Statement Public Policy Requirements and Objectives (https://grants.nih.gov/grants/policy/nihgps/HTML5/section_4/4.1_public_policy_requirements_and_objectives.htm), including submission of applicable assurances and certifications (see Public Policy Requirements, Objectives, and Other Appropriation Mandates).

Item 2- Add to results sharing item to “Section VII. PUBLICATION REVIEW AND APPROVAL” the following sentence:

Unless prohibited by law or any other applicable restrictions, the University of North Carolina at Chapel Hill agrees to work with EcoHealth Alliance to ensure the results and accomplishments of the activities funded by this project may be available to the research community and to the public at large.

Item 3 – In Section “X. SUBCONTRACTOR’S FINANCIAL RESPONSIBILITIES” replace first paragraph of the original text:

As applicable, the University of North Carolina at Chapel Hill agrees to adhere to all requirements contained in 2 CFR Part 200 – Uniform Administrative Requirements, Cost Principles, and Audit Requirements for

Federal Awards during the term of the agreement. The University of North Carolina at Chapel Hill acknowledges responsibility for Federal Audit requirements for funds received under this agreement and will provide EcoHealth Alliance a copy of their most current single audit report as may be provided. The University of North Carolina at Chapel Hill agrees that all overhead charged to this grant shall not exceed the amount permitted by the federal indirect cost rate in effect during the performance period. The University of North Carolina at Chapel Hill shall provide EcoHealth Alliance with a copy of their most current federal indirect cost rate agreement. If requested, the University of North Carolina at Chapel Hill will provide EcoHealth Alliance with a copy of a most current audit report. The University of North Carolina at Chapel Hill agrees to keep systematic records of all expenditures relating to this agreement. A quarterly financial report is required along with a signed invoice for services and reimbursement of expenses. Documentation of expenses, consisting of bills, invoices, receipts, logbooks (acceptable only for gasoline for cars and boats), etc., must be retained by the University of North Carolina at Chapel Hill for three (3) years after the close of the agreement period and must be available for inspection by representatives of EcoHealth Alliance at any time during this period. EcoHealth Alliance may, at its own expense, examine, audit, or have audited the records of the University of North Carolina at Chapel Hill insofar as they relate to activities supported by this agreement. All audits, inspections, and examinations must be reasonably requested, scheduled at least seven (7) business days in advance to occur during normal business hours, and are conducted at the sole expense of EcoHealth Alliance.

With the following, new text:

As applicable, the University of North Carolina at Chapel Hill agrees to adhere to all requirements contained in 2 CFR 200 (Uniform Administrative requirements, Cost Principles, and Audit Requirements for Federal Awards) and 45 CFR 75 (Uniform Administrative Requirements, Cost Principles, and Audit Requirements for HHS Awards) during the term of the agreement. The University of North Carolina at Chapel Hill acknowledges responsibility for all applicable CFR funds received under this agreement and will provide EcoHealth Alliance a copy of their most current A-133 or similar audit report as may be provided. The University of North Carolina at Chapel Hill agrees that all overhead charged to this grant shall not exceed the amount permitted by the federal indirect cost rate in effect during the performance period. The University of North Carolina at Chapel Hill shall provide EcoHealth Alliance with a copy of their most current federal indirect cost rate agreement. If requested, the University of North Carolina at Chapel Hill will provide EcoHealth Alliance with a copy of a most current audit report. The University of North Carolina at Chapel Hill agrees to keep systematic records of all expenditures relating to this agreement. Financial reports are required along with signed invoices for services and reimbursement of expenses. Documentation of expenses, consisting of bills, invoices, receipts, logbooks (acceptable only for gasoline for cars and boats), etc., must be retained by the University of North Carolina at Chapel Hill for three (3) years after the close of the agreement period and must be available for inspection by representatives of EcoHealth Alliance and its auditors at any time during this period. EcoHealth Alliance may, at its own expense, examine, audit, or have audited the records of the University of North Carolina at Chapel Hill insofar as they relate to activities supported by this agreement and as necessary for EcoHealth Alliance to meet the requirements under 45 CFR 75. All audits, inspections, and examinations must be reasonably requested, scheduled at least seven (7) business days in advance to occur during normal business hours, and are conducted at the sole expense of EcoHealth Alliance.

Item 4 – Added items in Attachment: Year 2 Scope of Work as follows:

Project Management and Coordination

- Ensure all permits and permissions are in place to conduct the work.
- Work with the PI to prepare reports to stakeholders and collaborators

- Complete the following programmatic and financial reporting by requested deadlines:
 - o Annual reports to NIAID
 - o Quarterly invoices and financial reports
 - o Other reports requested by NIAID

Results and data sharing, analysis, reporting

- Participate in the CREID Working Group discussions and work with EID-SEARCH global team to develop data management and sharing policies.
- Collaborate with the EID-SEARCH global team for data entry, cleaning, analysis, interpretation and contribute to scientific publications as agreed.
- Reach out to communities and present appropriately available findings and public health information
- Participate on calls with the EID-SEARCH global team at EHA as requested; hold regular team calls as agreed.
- Represent EID-SEARCH on planning and other relevant meetings.

Item 5 – All other terms and conditions remain unchanged and in full force and effect.

(b) (6)

Dr. Peter Daszak
President
EcoHealth Alliance

(b) (6)

For Penny Gordon-Larsen, PH.D.
Interim Vice Chancellor for Research
The University of North Carolina at Chapel Hill

04/29/2022
DATE

4/29/2022
DATE



EcoHealth Alliance

AMENDMENT II

NAME: International Centre for Diarrhoeal Disease Research, Bangladesh (hereinafter referred to as "icDDR,b")

ADDRESS: 68 Shaheed Tajuddin Ahmed Sarani, Mohakhali, Dhaka 1212, Bangladesh.

REFERENCE LOG #: Nipah Bangladesh

PROJECT TITLE: Study of Nipah virus dynamics and genetics in its bat reservoir and of human exposure to NiV across Bangladesh to understand patterns of human outbreaks

PERIOD: 15 NOVEMBER 2020 – 30 JUNE 2021

PHONE: 880-2-9827072

FOR NOTICES AND APPROVAL: Mr. Md. Sakhawat Hossain
Contracts Manager, Regulatory & Legal Affairs
68 Shaheed Tajuddin Ahmed Sarani
Mohakhali, Dhaka 1212, Bangladesh

Email: (b) (6)

FUNDING SOURCE: 07-144-7012-52035

CFDA: 93.855

UNIQUE ENTITY ID NUMBER: MS5NE1JLU463

AGREEMENT AMOUNT: USD \$61,853.00

Amendments to the Original Terms & Conditions

Item 1 - Add two NIH Grants Policy items to Section "II. CONDITIONS OF THE SUBAWARD AND AGREEMENT" numbered 6. And 7. as follows:

6. Federal Funding Accountability and Transparency Act: the researcher agrees to fill out Attachment C: FFATA and provide EcoHealth Alliance with all information required by this law

including, if required, executive compensation data for publication on applicable US government websites.

7. NIH Grants Policy: As applicable, the researcher will adhere to all NIH Grants Policy Statement Public Policy Requirements and Objectives (https://grants.nih.gov/grants/policy/nihgps/HTML5/section_4/4.1_public_policy_requirements_and_objectives.htm), including submission of applicable assurances and certifications (see Public Policy Requirements, Objectives, and Other Appropriation Mandates).

Item 2- Add a Section “V. REPORTING REQUIREMENTS” with the following text:

*The researcher agrees to fulfill the program scope of services and reporting requirements that are incorporated into this agreement and detailed in **Attachment A: Project Deliverables**.*

Item 3 – Add results sharing item to the end of the Section “VIII. PUBLICATION REVIEW AND APPROVAL” as follows:

...or as may be otherwise determined and required by the parent award from NIH/NIAID in the acknowledgements. Written work that is not approved by EcoHealth Alliance may not recognize EcoHealth Alliance or NIH/NIAID in the acknowledgements. Unless prohibited by law or any other applicable restrictions, the researcher agrees to work with EcoHealth Alliance to ensure the results and accomplishments of the activities funded by this project may be available to the research community and to the public at large.

Item 4 – In Section “XI. RESEARCHER’S FINANCIAL RESPONSIBILITIES” replace first paragraph of the original text:

As applicable, the researcher agrees to adhere to all requirements contained in 2 CFR 200 (Uniform Administrative requirements, Cost Principles, and Audit Requirements for Federal Awards) The researcher acknowledges responsibility for 2 CFR 200 Subpart F Federal Audit requirements for funds received under this agreement and will provide EcoHealth Alliance a copy of their most current 2 CFR 200 Subpart F or similar audit report as may be provided. The researcher agrees that all overhead charged to this grant shall not exceed the amount permitted by the federal indirect cost rate in effect during the performance period. The researcher shall provide EcoHealth Alliance with a copy of their most current federal indirect cost rate agreement.

The researcher agrees to keep systematic records of all expenditures relating to this agreement. A quarterly financial report may be required along with the required signed invoice for services for the researcher to be reimbursed for expenses. Documentation of expenses, consisting of bills, invoices, receipts, log books (acceptable only for gasoline for cars and boats), etc., must be submitted to EHA, as well as retained by the researcher for five (5) years after the close of the agreement period, and must be available for inspection by representatives of EcoHealth Alliance at any time during this period. EcoHealth Alliance may, at its own expense, examine, audit, or have audited the records of the researcher insofar as they relate to activities supported by this agreement.

With the following, new text:

As applicable, the researcher agrees to adhere to all requirements contained in 2 CFR 200 (Uniform Administrative requirements, Cost Principles, and Audit Requirements for Federal Awards) and 45 CFR 75 (Uniform Administrative Requirements, Cost Principles, and Audit Requirements for HHS Awards) during the term of the agreement. The researcher acknowledges responsibility for all applicable CFR requirements for funds received under this agreement and will provide EcoHealth Alliance a copy of their most current 2 CFR 200 Subpart F or similar audit report as may be provided. The researcher agrees that all overhead charged to this grant shall not exceed the amount permitted by the federal indirect cost rate in effect during the performance period. The researcher shall provide EcoHealth Alliance with a copy of their most current federal indirect cost rate agreement.

The researcher agrees to keep systematic records of all expenditures relating to this agreement. A quarterly financial report may be required along with the required signed invoice for services for the researcher to be reimbursed for expenses. Documentation of expenses, consisting of bills, invoices, receipts, log books (acceptable only for gasoline for cars and boats), etc., must be retained by the researcher for five (5) years after the close of the agreement period, and must be available for inspection by representatives of EcoHealth Alliance and its auditors at any time during this period. EcoHealth Alliance may, at its own expense, examine, audit, or have audited the records of the researcher insofar as they relate to activities supported by this agreement and as necessary for EcoHealth Alliance to meet the requirements under 45 CFR 75.

Item 4 – Replace correspondence contact in Section “XVII. NOTICE” with:

(b) (6)
(e) (b) (6)

Item 5 – Add a 1-page ATTACHMENT C: FFATA containing the following text:

ATTACHMENT C: FFATA

The Federal Funding Accountability and Transparency Act (FFATA) was signed on September 26, 2006 and requires information on federal awards (federal financial assistance and expenditures) be made available to the public via a single, searchable website, which is www.USASpending.gov. All contractors receiving funds from EcoHealth Alliance are required to provide the following information as a condition of receiving funds.

Please answer the following questions Yes or No.

A. *In the last tax year, was your company’s gross income from all sources above USD\$300,000?*
 Yes No

B. *In your business or organization's last completed fiscal year, did you receive (a) 80 percent or more of your annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (b) \$25,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?*

Yes No

C. Does the public have access to information about the compensation of the executives in your business or organization through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?

Yes No

D. Does your business or organization maintain an active registration in the System for Award Management (www.SAM.gov)?

Yes No

Item 6 – All other terms and conditions remain unchanged and in full force and effect.

I acknowledge that I have received and retained a copy of this agreement. By signing this agreement, I acknowledge that I have read and understood all the terms and conditions herein I also acknowledge that all the terms and conditions set forth herein are acceptable to me, and I agree to be bound by them.

(b) (6)

Dr. Peter Daszak
President, EcoHealth Alliance

28 April 2022
DATE

(b) (6)

Dr. Tahmeed Ahmed
Executive Director

DATE

Acknowledged by:
(b) (6)

Dr. Mohammad Ziaur Rahman
Scientist
Principal Investigator

28 April 2022
DATE



EcoHealth Alliance

AMENDMENT III

NAME: Institute of Epidemiology Disease Control and Research (IEDCR), Bangladesh

ADDRESS: Mohakhali, Dhaka 1212, Bangladesh.

REFERENCE LOG #: Nipah Bangladesh

PROJECT TITLE: Study of Nipah virus dynamics and genetics in its bat reservoir and of human exposure to NiV across Bangladesh to understand patterns of human outbreaks

PERIOD: 15 NOVEMBER 2020 – 30 JUNE 2021

PHONE: +880 1944 333222

EMAIL: (b) (6)

FUNDING SOURCE: 1U01AI153420

UNIQUE ENTITY ID NUMBER: QJ2QU5GNKMR5

AGREEMENT AMOUNT: USD \$142,216.00

Amendments to the Original Terms & Conditions

Item 1 - Add two NIH Grants Policy items to Section "II. CONDITIONS OF THE SUBAWARD AND AGREEMENT" numbered 6. And 7. as follows:

6. Federal Funding Accountability and Transparency Act: the researcher agrees to fill out Attachment C: FFATA and provide EcoHealth Alliance with all information required by this law including, if required, executive compensation data for publication on applicable US government websites.

7. NIH Grants Policy: As applicable, the researcher will adhere to all NIH Grants Policy Statement Public Policy Requirements and Objectives (https://grants.nih.gov/grants/policy/nihgps/HTML5/section_4/4.1_public_policy_requirements_and_objectives.htm), including submission of applicable assurances and certifications (see Public Policy Requirements, Objectives, and Other Appropriation Mandates).

Item 2- Add a Section "V. REPORTING REQUIREMENTS" with the following text:

*The researcher agrees to fulfill the program scope of services and reporting requirements that are incorporated into this agreement and detailed in **Attachment A: Project Deliverables**.*

Item 3 – Add results sharing item to the end of the Section "VII. PUBLICATION REVIEW AND APPROVAL" as follows:

...or as may be otherwise determined and required by the parent award from NIH/NIAID in the acknowledgements. Written work that is not approved by EcoHealth Alliance may not recognize EcoHealth Alliance or NIH/NIAID in the acknowledgements. Unless prohibited by law or any other applicable restrictions, the researcher agrees to work with EcoHealth Alliance to ensure the results and accomplishments of the activities funded by this project may be available to the research community and to the public at large.

Item 4 – In Section "X. RESEARCHER'S FINANCIAL RESPONSIBILITIES" replace first paragraph of the original text:

As applicable, the researcher agrees to adhere to all requirements contained in 2 CFR 200 (Uniform Administrative requirements, Cost Principles, and Audit Requirements for Federal Awards) The researcher acknowledges responsibility for 2 CFR 200 Subpart F Federal Audit requirements for funds received under this agreement and will provide EcoHealth Alliance a copy of their most current 2 CFR 200 Subpart F or similar audit report as may be provided. The researcher agrees that all overhead charged to this grant shall not exceed the amount permitted by the federal indirect cost rate in effect during the performance period. The researcher shall provide EcoHealth Alliance with a copy of their most current federal indirect cost rate agreement.

The researcher agrees to keep systematic records of all expenditures relating to this agreement. A quarterly financial report may be required along with the required signed invoice for services for the researcher to be reimbursed for expenses. Documentation of expenses, consisting of bills, invoices, receipts, log books (acceptable only for gasoline for cars and boats), etc., must be submitted to EHA, as well as retained by the researcher for five (5) years after the close of the agreement period, and must be available for inspection by representatives of EcoHealth Alliance at any time during this period. EcoHealth Alliance may, at its own expense, examine, audit, or have audited the records of the researcher insofar as they relate to activities supported by this agreement.

With the following, new text:

As applicable, the researcher agrees to adhere to all requirements contained in 2 CFR 200 (Uniform Administrative requirements, Cost Principles, and Audit Requirements for Federal Awards) and 45 CFR 75 (Uniform Administrative Requirements, Cost Principles, and Audit Requirements for HHS Awards) during the term of the agreement. The researcher acknowledges responsibility for all applicable CFR requirements for funds received under this agreement and will provide EcoHealth Alliance a copy of their most current 2 CFR 200 Subpart F or similar audit report as may be provided. The researcher agrees that all overhead charged to this grant shall not exceed the amount permitted by the federal indirect cost rate in effect during the



performance period. The researcher shall provide EcoHealth Alliance with a copy of their most current federal indirect cost rate agreement.

The researcher agrees to keep systematic records of all expenditures relating to this agreement. A quarterly financial report may be required along with the required signed invoice for services for the researcher to be reimbursed for expenses. Documentation of expenses, consisting of bills, invoices, receipts, log books (acceptable only for gasoline for cars and boats), etc., must be submitted to EHA, as well as retained by the researcher for five (5) years after the close of the agreement period, and must be available for inspection by representatives of EcoHealth Alliance and its auditors at any time during this period. EcoHealth Alliance may, at its own expense, examine, audit, or have audited the records of the researcher insofar as they relate to activities supported by this agreement and as necessary for EcoHealth Alliance to meet the requirements under 45 CFR 75.

Item 4 – Replace correspondence contact in Section “XVI. NOTICE” with:

(b) (6)
(e) (b) (6)

Item 5 – Add a 1-page ATTACHMENT C: FFATA containing the following text:

ATTACHMENT C: FFATA

The Federal Funding Accountability and Transparency Act (FFATA) was signed on September 26, 2006 and requires information on federal awards (federal financial assistance and expenditures) be made available to the public via a single, searchable website, which is www.USASpending.gov. All contractors receiving funds from EcoHealth Alliance are required to provide the following information as a condition of receiving funds.

Please answer the following questions Yes or No.

- A. In the last tax year, was your company's gross income from all sources above USD\$300,000?
 Yes No
- B. In your business or organization's last completed fiscal year, did you receive (a) 80 percent or more of your annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; and (b) \$25,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?
 Yes No
- C. Does the public have access to information about the compensation of the executives in your business or organization through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?
 Yes No

D. Does your business or organization maintain an active registration in the System for Award Management (www.SAM.gov)?

Yes No

Item 6 – All other terms and conditions remain unchanged and in full force and effect.

I acknowledge that I have received and retained a copy of this agreement. By signing this agreement, I acknowledge that I have read and understood all the terms and conditions herein I also acknowledge that all the terms and conditions set forth herein are acceptable to me, and I agree to be bound by them.

(b) (6)

Dr. Peter Daszak
President, EcoHealth Alliance

25 April 2022
DATE

(b) (6) 25.4.22

Prof Tahmina Shirin, PhD
Director, IEDCR

Prof. Dr. Tahmina Shirin PhD
Director
Institute of Epidemiology Disease Control and Research (IEDCR)
Mohakhali, Dhaka

DATE



CONTRACT AGREEMENT

NAME: Conservation Medicine Ltd

ADDRESS: Lot No 20, Level 1, Lazenda Commercial Centre,
Phase 3, Jalan OKK Abdullah, 87000 Labuan FT., MALAYSIA

PROJECT TITLE Understanding Risk of Zoonotic Virus Emergence in EID Hotspots of
Southeast Asia

PERIOD 17 June 2020 – 31 May 2021

PHONE: +60.19.392.8307

EMAIL: (b) (6)

FUNDING SOURCE: NIH/NIAID/CREID/07-049-7012-52338

DUNS NUMBER: 534409256

AGREEMENT AMOUNT: \$224,998.15

This Agreement is by and between EcoHealth Alliance, a United States tax-exempt organization, located at 520 Eighth Avenue, Suite 1200, New York, New York, 10018, and Conservation Medicine Ltd.

An authorized representative of EcoHealth Alliance has executed the original version of this agreement. Please sign the digital copy and return it via email. If EcoHealth Alliance does not receive a signed digital copy within thirty (30) days of mailing, this agreement may be deemed revoked. This agreement shall be effective only upon the receipt of a signed version by EcoHealth Alliance.

I. TERM AND AMOUNT OF THE AGREEMENT

Subject to the continued availability of funding for this project, the term of this agreement shall be as per the period stated above, renewable for an additional term solely by written agreement between Conservation Medicine Ltd and EcoHealth Alliance.

The amount of the contract as indicated on the preceding page and detailed in **Attachment C: Project Budget** is to be disbursed following receipt of a signed, detailed invoice(s), percentage of effort rate(s), and date(s) worked, or locations and dates for travel and all other details as elaborated in the Financial Responsibilities section below, or subject to availability of funds a \$25,000 advance to be spent on agreed project expenses. All deliverables and project details are elaborated in **Attachment B: Scope of Work**.

II. CONDITIONS OF THE AGREEMENT

The laws of the United States place certain restrictions on the use of funds awarded to organizations by charitable trusts and foundations. Therefore, Conservation Medicine Ltd agrees to the following terms and conditions:

1. **Internal Revenue Code:** Funds awarded by EcoHealth Alliance may not be used for any forbidden political activities or for any purposes prohibited by the United States Internal Revenue Service Code.
2. **Foreign Corrupt Practices Act of 1977: as amended:** Conservation Medicine Ltd agrees to be bound by this act that prohibits individuals and entities from making payments to foreign government officials for the purposes of obtaining business. This includes the offer, either directly or indirectly, of anything of value, to a foreign government official to influence that official in his or hers official capacity to do or omit any act in violation of their official capacity or lawful duty, or to secure any improper advantage in order to assist in obtaining or retaining business for or with, or directing business, to any person.

Conservation Medicine Ltd's director, officers, employees and agents have not and will not offer, pay, promise or authorize the payment, directly or indirectly through any other person or entity, of any monies or anything of value to any governmental official or employee or any political party or candidate for political office, for the purpose of inducing or rewarding any favorable action or influencing any act or decision of such official or of the government.

Funds in this agreement may not be used to finance the travel, per diem, hotel expenses, meals, conference fees or other conference costs for any member of a foreign government's delegation to an international conference sponsored by a public international organization, except as otherwise agreed upon by EcoHealth Alliance and Conservation Medicine Ltd.

3. **Support for Acts of Terror:** Conservation Medicine Ltd certifies and represent that they will be bound by U.S. anti-terrorism legislation that prohibit having transactions with and providing material support or resources to individuals or groups that engage in or support acts of terror

and that Conservation Medicine Ltd does not engage in or support, directly or indirectly, acts of terror.

4. **Financial Conflict of Interest:** Conservation Medicine Ltd certifies and represents that no Significant Financial Conflict of Interest exists regarding participation in this project that would influence the research. They furthermore agree that if such a conflict develops during the course of this project they will promptly notify and disclose that conflict in writing to the EHA Principal Investigator and the EHA Chief financial Officer and may be required to develop a plan of corrective action to resolve that matter. This requirement shall extend to all individuals with managerial oversight of this grant including their spouse and dependent children.
5. **Federal Funding Accountability and Transparency Act:** Conservation Medicine Ltd agrees to fill out **Attachment A: FFATA** and provide EcoHealth Alliance with all information required by this law including, if required, executive compensation data for publication on applicable US government websites.
6. **Non-Discrimination Policy:** Conservation Medicine Ltd will follow a comprehensive, consistent, and non-discriminatory policy to the extent it can accomplish this goal within the scope of the program objectives.

Conservation Medicine Ltd acknowledges that EcoHealth Alliance is implementing, and over the course of this agreement will continue to implement, reasonable monitoring and oversight to assure the continuing truth of these representations and certifications and that, on request, Conservation Medicine Ltd will provide documentation of the monitoring and oversight of these efforts.

Notwithstanding any term to the contrary, EcoHealth Alliance may terminate this contract with a five (5) business day written notice if it determines that Conservation Medicine Ltd fails to comply with the conditions stated in this contract. In the event of termination, regardless of whether or not termination was due to breach of this contract, EcoHealth Alliance shall pay Conservation Medicine Ltd for all approved expenses prior to the effective date of termination.

EcoHealth Alliance and Conservation Medicine Ltd acknowledge that all funds under this agreement excluding the indirect costs will be paid to Conservation Medicine Ltd as trust monies for the sole purposes of this agreement, for which Conservation Medicine Ltd shall hold as trustee. Conservation Medicine Ltd indirect costs will accrue to Conservation Medicine Ltd and be used to cover operating expenses.

III. USE OF FUNDS

The contract monies, including any interest earned, may only be used for the purpose(s) stated in this agreement, as contained in the approved budget in **Attachment C: Project Budget** and detailed in **Attachment B: Scope of Work**.

Funds may not be expended for any other purpose without the prior written approval of EcoHealth Alliance. Should there be a material change in the purpose, character, or method of operation of the agreement, Conservation Medicine Ltd agrees to give prompt and detailed written notice to EcoHealth

Alliance. The contract project shall be performed to EcoHealth Alliance's satisfaction as determined by EcoHealth Alliance.

Where appropriate, Conservation Medicine Ltd agrees to conform to accepted animal care and use practices as laid out in the latest IACUC, if applicable, approved by EcoHealth Alliance, and filed with the appropriate regulatory authorities. Conservation Medicine Ltd also agrees to follow all requirements regarding scientific conduct.

IV. NATURE OF RELATIONSHIP

The parties hereto intend by this agreement solely to specify the terms for Conservation Medicine Ltd's use of EcoHealth Alliance contract funds. Nothing in this agreement shall be construed as creating or constituting the relationship of employer and employee between EcoHealth Alliance and Conservation Medicine Ltd or the continuation of funding from EcoHealth Alliance. During the course of completing the contract project work, Conservation Medicine Ltd remains a distinct and separate legal entity from that of EcoHealth Alliance.

Conservation Medicine Ltd agrees to conform to the laws and regulations of the location in which they operate and obtain all required permits, agreements and insurance required by local authorities. They also agree to pay all fees and taxes levied on this project by applicable political authorities or designated subdivisions utilizing the funds of this agreement.

V. REPORTING REQUIREMENTS

Conservation Medicine Ltd agrees to fulfill the program scope of services and reporting requirements that are incorporated into this agreement and detailed in **Attachment B: Scope of Work**.

VI. CONFIDENTIALITY; PROPRIETARY INFORMATION AND DATA

The parties agree that all information and records exchanged in connection with this Agreement shall be treated as strictly confidential, and shall not be used or disclosed for any purpose other than the performance of the Agreement and implementation of the Project. Unless stated otherwise herein or agreed to in writing and signed by both parties, nothing contained in this Agreement shall, by express grant, implication, estoppel or otherwise, convey to either party any right, title, interest, or license in the inventions, patents, trademarks (including logos), technical data, computer software, or software documentation of the other party. EHA and the Subrecipient retain equal rights to and ownership of any and all media (photos, video, audio recorded by the Subrecipient as related to this Project) developed with respect to this Agreement and the implementation of the Project. Any publication of media must credit EcoHealth Alliance and Conservation Medicine Ltd. Intellectual property rights with regards to viral sequences and scientific publications will be co-owned by EHA and the subrecipient. The provisions of this paragraph shall survive the expiration or earlier termination of this Agreement. Further, the Subrecipient shall also adhere to EHA's other IP-sharing agreements insofar as they relate to data and products derived from work described in this agreement, e.g. sharing agreements with local in-country partners including but not limited to government agencies, NGOs and universities. EHA may provide details of data sharing agreements with other parties upon request from the Subrecipient.

VII. PUBLICATION REVIEW AND APPROVAL

The parties agree that prior to the publication of any written work made possible by this EcoHealth Alliance contract agreement, or involving data or information gained in whole or in part from research or activity conducted under this agreement, a copy of such work must be shared for pre-publication review and recommendations for revision. The parties are under no obligation to make any changes to the requested publication, except to delete Confidential Information within the EcoHealth Alliance review period. The parties will respond within thirty (30) days of notification. All published work must recognize EcoHealth Alliance and Conservation Medicine Ltd, and as required by the parent award NIAID in the acknowledgements. Written work that is not approved by EcoHealth Alliance may not recognize EcoHealth Alliance or NIAID in the acknowledgements.

VIII. EVALUATION OF THE AGREEMENT

At its own expense, EcoHealth Alliance may monitor and conduct an evaluation of operations under this contract agreement. Evaluation may include visits to Conservation Medicine Ltd by representatives of EcoHealth Alliance in order to observe and discuss the funded project.

IX. DISBURSEMENT OF FUNDS

Unless otherwise stated below, contract funds shall be disbursed by EcoHealth Alliance based on the following criteria:

1. Conservation Medicine Ltd shall submit a valid invoice to EcoHealth Alliance indicating the services performed, as well as the time period covered by the invoice. Conservation Medicine Ltd should attach all supporting documentation needed to substantiate any out-of-pocket expenses.
2. Conservation Medicine Ltd must sign the invoice as certification that the services rendered, and all expenses incurred have been pursuant to the scope of service contained in this agreement.
3. EcoHealth Alliance will invoice the funding source for the value of the invoice and remit the funds to Conservation Medicine Ltd in a timely manner.
4. EcoHealth Alliance reserves the right to delay payment of any funds due to insufficient documentation submitted by Conservation Medicine Ltd.
5. Conservation Medicine Ltd acknowledges that all invoices must be submitted to EcoHealth Alliance no more than 45-days after the end of the contract. Invoices submitted after these periods may not be invoiced to the funding source and may not be paid to Conservation Medicine Ltd.

Unless otherwise directed, EcoHealth Alliance shall remit US funds by bank wire made payable to Conservation Medicine Ltd. The legal name of Conservation Medicine Ltd, who must be the sole owner of the account, must appear on the account. Conservation Medicine Ltd shall provide the following banking information to EcoHealth Alliance:

Organization Name: Conservation Medicine Ltd
Bank Name: CIMB BANK BERHAD
Bank Address: Plaza Yeoh Tiong Lay, 55 Jalan Bukit Bintang, 55100, Kuala Lumpur, Malaysia
Account Number: [REDACTED]
ABA Code: [REDACTED]

X. SUBCONTRACTOR 'S FINANCIAL RESPONSIBILITIES

As applicable, Conservation Medicine Ltd agrees to adhere to all requirements contained in OMB Circular A-122 during the term of the agreement. Conservation Medicine Ltd acknowledges responsibility for A-133 Federal Audit requirements for funds received under this agreement and will provide EcoHealth Alliance a copy of their most current A-133 or similar audit report as may be provided. Conservation Medicine Ltd agrees that all overhead charged to this grant shall not exceed the amount permitted by the applicable or de minimus federal indirect cost rate in effect during the performance period. Conservation Medicine Ltd shall provide EcoHealth Alliance if applicable with a copy of their most current federal indirect cost rate agreement. If requested, Conservation Medicine Ltd will provide EcoHealth Alliance with a copy of a most current audit report. Conservation Medicine Ltd agrees to keep systematic records of all expenditures relating to this agreement. A quarterly financial report is required along with a signed invoice for services and reimbursement of expenses. Documentation of expenses, consisting of bills, invoices, receipts, logbooks (acceptable only for gasoline for cars and boats), etc., must be retained by Conservation Medicine Ltd for five (5) years after the close of the agreement period and must be available for inspection by representatives of EcoHealth Alliance at any time during this period. EcoHealth Alliance may, at its own expense, examine, audit, or have audited the records of Conservation Medicine Ltd insofar as they relate to activities supported by this agreement.

Conservation Medicine Ltd budget records must be itemized in the following categories, as applicable:

1. Salary or stipend – detailed by person, rate, date, and amount. Pay stubs or signed acknowledgement of receipt for stipend may be requested as documentation for personnel expenses.
2. Fringe – as applicable, same as above
3. Equipment – an original or copy (when original is not available) of all receipts or purchase orders must be provided with financial reports for all capital equipment items (items costing \$5,000 or above). **Please note that capital equipment purchases require EHA approval.**
4. Domestic Travel – trip cost indicating departure/arrival dates, air/car/train/boat costs, and accommodation cost per person along with all boarding passes and other receipts (including receipt for lodging). For vehicle –associated costs, mileage to be indicated along with any associated costs: driver, repairs, insurance, etc. Detailed logbooks (including dates, times, and signatures) are acceptable when signed by both Subrecipient and EHA or responsible party. **Includes meals in transit.** All domestic travel lodging, meal, and incidental expenses must be within United States Government per diem rates.
5. International Travel – same as above.
Please note that international travel requires EHA approval.
6. Purchased services (e.g., field asst., boat hire) – detailed at the level above.
7. Diagnostics – cost of testing, incl. lab disposables, labor (if not included above), use of equipment, etc.

8. Field Supplies – receipts must be supplied for all items.
9. Other – any other items that do not fall into the categories above with same level of detail

Conservation Medicine Ltd shall submit detailed invoices to EcoHealth Alliance detailing actual expenditures compared to the approved budget or contract total. Invoices are subject to review and approval of EcoHealth Alliance's principal investigator and/or grants and programs manager who shall certify that all expenses are in conformity with the award.

EcoHealth Alliance reserves the right to request documentation of all costs incurred as part of its normal practices in the use of federal funds.

XI. PURCHASE OF CAPITAL EQUIPMENT

For all capital equipment (items valued over US \$5,000 and with a useful life of one year or more) purchased under this agreement, a completed Capital Equipment Inventory must be submitted to EHA at the end of the Term (including any approved extensions). Conservation Medicine Ltd agrees to use this equipment for other projects or programs only with EHA approval and so long as such use does not interfere with the Project work for which it was originally acquired. Conservation Medicine Ltd also agrees to maintain it in proper working order.

All supply purchases over \$3,000 for a single item require the prior approval of EHA.

XII. UNUSED FUNDS

Conservation Medicine Ltd agrees to return to EcoHealth Alliance at the conclusion of the agreement period all agreement funds that have not been used to complete the project, excluding the indirect funds. Conservation Medicine Ltd may not use agreement funds after the end of the agreement period without the written consent of EcoHealth Alliance unless both Conservation Medicine Ltd and EcoHealth Alliance agree to an extension of this contract and both parties sign this in the form of an amendment.

XIII. REVOCATION AND REVERSION

With 30 day's notification and if EcoHealth Alliance determines at its sole discretion that continuation of the project is no longer in the best interests of EcoHealth Alliance, EcoHealth Alliance retains the right to cancel all unpaid installments of the agreement and to require Conservation Medicine Ltd to repay all portions of the agreement that are within Conservation Medicine Ltd's control. In addition, EcoHealth Alliance may require Conservation Medicine Ltd to refund to EcoHealth Alliance funds that EcoHealth Alliance considers have been misused or misappropriated. Circumstances that may cause EcoHealth Alliance to revoke the agreement or demand repayment include, but are not limited to:

1. Material changes in the purpose, character, or method of operation of the agreement;
2. Contract agreement application or any required report is found by EcoHealth Alliance to be inaccurate in any material respect;
3. EcoHealth Alliance determines that Conservation Medicine Ltd has failed to perform any of the terms of this agreement; and
4. Conservation Medicine Ltd in the judgment of EcoHealth Alliance has misused EcoHealth Alliance's name or otherwise harmed the reputation of EcoHealth Alliance.

XIV. INSURANCE AND LIABILITY

By accepting the terms and conditions of this agreement, Conservation Medicine Ltd also accepts full responsibility for any and all insurance needs, such as medical, vehicle, evacuation, etc. for themselves and all other project related personnel utilizing the funds of this subcontract, unless a separate arrangement has been made between EcoHealth Alliance and Conservation Medicine Ltd. By signing this agreement, Conservation Medicine Ltd relieves EcoHealth Alliance from any and all liability due to accident or injury to Conservation Medicine Ltd in relation to the contract project.

XV. ADDITIONAL SUPPORT

In making this contract agreement, EcoHealth Alliance assumes no obligation to provide other or additional support to Conservation Medicine Ltd.

XVI. NOTICE

All correspondence and project reports should include the reference log number and follow the reporting guidelines described above. Copies should be directed to:

Dr. Aleksei Chmura
EcoHealth Alliance
520 Eighth Avenue, Suite 1200
New York, NY 10018
(t) 1.212.380.4460
(e) [REDACTED] (b) (6)

XVII. INDEMNIFICATION

Conservation Medicine Ltd and EcoHealth Alliance hereby mutually agree to indemnify and hold each other, respectively, and each other's affiliates, officers, employees, successors and assigns, harmless from and against claims, demands, actions, proceedings, investigation and right of action, including reasonable attorneys' fees and costs, whether action is instituted or not and, if instituted, whether at any trial or appellate level, whether raised by the other party or a third party, arising from the intentional acts, errors or omissions of Conservation Medicine Ltd or EcoHealth Alliance.

For the avoidance of doubt, EcoHealth Alliance agrees to indemnify and hold the Subrecipient and his successors harmless from and against any claim by the Malaysian Inland Revenue Board arising from and relating to the funds flowing into Malaysia for the purposes of and in connection with this agreement, provided that the Subrecipient shall remain personally liable for his personal income tax obligations, if any.

XVIII. PARTIAL INVALIDITY

If any term or provision of this agreement to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this agreement shall not be affected thereby and shall be valid and enforceable to the fullest extent permitted by law.

XIX. Biosafety

Laboratory

- EcoHealth Alliance will review and evaluate the lab biosafety at project research sites, provide annual trainings, and conduct laboratory inspections as needed.
- All partner laboratories are required to submit applicable approval documents from their Institutional Biosafety Committees (IBC) to EcoHealth Alliance for review following signed contracts, to ensure the compliance with *NIH and CDC guidelines* (link below) or comparable. No laboratory work may be conducted without confirmed receipt by EcoHealth Alliance of these documents.
- Biosafety review and evaluation for all partner laboratories will be conducted following the *NIH and CDC Guidelines* (link below) or comparable.
- Any accident or concern related to work funded under this award must be reported to EcoHealth Alliance and your Institutional Biosafety Committee (IBC) within 72 hours and will be investigated by an independent auditor. Work will be suspended immediately until an investigation is completed to the satisfaction of EcoHealth Alliance.

NIH Guidelines: https://www.dropbox.com/s/sa0g11uyfrnl39t/NIH_Guidelines%202019.pdf?dl=0

CDC Laboratory Biosafety Manual:

<https://www.dropbox.com/s/bp1g59x6bq18ehl/CDC%20Biosafety%20Guidelines.pdf?dl=0>

Field

- EcoHealth Alliance will have oversight of the field work biosafety, provide training, and enforcing biosafety regulations in the field for all work with animals.
- In-country Institutional Animal Care and use Committee (IACUC) and Institutional Review Board (IRB) approvals to work with wild animals and human subjects are required to be submitted to EcoHealth Alliance following signed contracts. No fieldwork may be conducted without confirmed receipt by EcoHealth Alliance of these approvals.
- Review and approval will be conducted globally and locally with the IACUCs and IRBs.
- Field biosafety trainings will be conducted every other year or more frequently as necessary. Online refresher trainings will be made available every year for all members of teams working with wild animals, humans, and relevant specimens.

XX. OTHER PROVISIONS

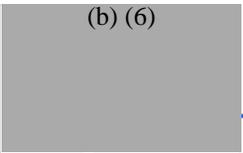
This agreement may not be transferred or assigned by either party without the prior written consent of the other, and any breach of this prohibition will deem the agreement null and void.

Both parties agree that either party may terminate this agreement following confirmation of a 30 day notice to the other party. Ecohealth Alliance will reimburse Conservation Medicine Ltd for all approved costs incurred up to the point of termination.

Each party represents and warrants that its authorized agent(s) have duly executed this agreement on its behalf.

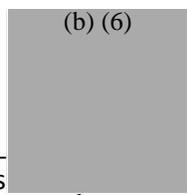
This agreement constitutes a single integrated contract expressing the entire agreement of the parties hereto. There are no other agreements, written or oral, express or implied, between the parties hereto, concerning the subject matter hereof, except the agreements set forth in this agreement. Any amendment to this agreement is effective only if set forth in writing and signed by both parties.

(b) (6)



Dr. Peter Daszak
President, EcoHealth Alliance

(b) (6)



Thomas Hughes
Director, Conservation Medicine Ltd.

30 November 2020
DATE

30 November 2020
DATE

ATTACHMENT A: FFATA

The Federal Funding Accountability and Transparency Act (FFATA) was signed on September 26, 2006 and requires information on federal awards (federal financial assistance and expenditures) be made available to the public via a single, searchable website, which is www.USASpending.gov. All contractors receiving funds from EcoHealth Alliance are required to provide the following information as a condition of receiving funds.

Please answer the following questions Yes or No.

- a. In the previous tax year, was your company's gross income from all sources above \$300,000?

Yes No

- b. In Conservation Medicine Ltd.'s business or organization's preceding completed fiscal year, did its business or organization (the legal entity to which the DUNS number it provided belongs) receive (1) 80 percent or more of its annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; **and** (2) \$25,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?

Yes No

- c. Does the public have access to information about the compensation of the executives in Conservation Medicine Ltd.'s business or organization (the legal entity to which the DUNS number it provided belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?

Yes No

- d. Does your business or organization maintain an active registration in the System for Award Management (www.SAM.gov)?

Yes No

ATTACHMENT B: Scope of Work

Under the supervisor of Mr. Tom Hughes, Co-Investigator

1. Coordinate and conduct all field work and lab work released to this contract in Malaysia.
 - Bat and rodent sampling at cave sites in Malaysia
 - Sampling of Orang Asli and other high risk communities
 - Syndromic surveillance
 - Further characterisation of the 15 novel paramyxoviruses and 12 novel corona viruses found through PREDICT
2. Coordinate fieldwork for this project in conjunction with DTRA activities for the Serological Biosurveillance for Spillover of Henipaviruses and Filoviruses at Agricultural and Hunting Human-Animal Interfaces in Peninsular Malaysia project in Malaysia (where applicable)
3. Facilitate and coordinate training workshops and capacity building efforts at partner institutions.
4. Facilitate communication between PI and in-country collaborators.
5. Ensure all in-country permits and permissions are in place to conduct the work.
6. Work with in-country partners to identify archived samples to screen, as appropriate
7. Work with the PI to prepare reports to stakeholders and collaborators
8. Contribute to data analysis, manuscript preparation, and dissemination of results to stakeholders

ATTACHMENT C: PROJECT BUDGET

| Item. | US Dollars per month. | Month | June 17th 2020 - May 31st 2021 |
|--|-----------------------|---------------------|--------------------------------|
| PERSONNEL | | | |
| Salaries and wages | | | |
| Tom Hughes (Program Coordinator) | \$ 10,312.00 | 4.0 | \$ 41,248.00 |
| (b) (6) (Lab Coordinator) | \$ 2,523.50 | 4.5 | \$ 11,355.75 |
| (b) (6) (Field Coordinator) | \$ 2,422.67 | 4.5 | \$ 10,902.00 |
| Fernandes Opook (WHGFL Manager) | \$ 1,123.24 | 6.0 | \$ 6,739.45 |
| (b) (6) (Program Assistant) | \$ 1,248.46 | 5.0 | \$ 6,242.32 |
| (b) (6) EHA Lab Tech | \$ 912.80 | 6.0 | \$ 5,476.81 |
| (b) (6) (PM CM Ltd Lab Tech) | \$ 840.80 | 5.0 | \$ 4,203.99 |
| (b) (6) (Ranger) | \$ 840.80 | 5.5 | \$ 4,624.39 |
| (b) (6) (Ranger) | \$ 840.80 | 5.5 | \$ 4,624.39 |
| (b) (6) (Ranger) | \$ 840.80 | 5.5 | \$ 4,624.39 |
| (b) (6) (Ranger & Lab Tech) | \$ 840.80 | 4.5 | \$ 3,783.59 |
| Ranger | \$ 840.80 | 5.5 | \$ 4,624.39 |
| Ranger | \$ 840.80 | 5.5 | \$ 4,624.39 |
| Vet | \$ 1,390.01 | 5.0 | \$ 6,950.04 |
| TOTAL SALARIES AND WAGES | | | \$ 120,023.89 |
| Fringe | | | |
| Insurance cover for (b) (6) (monthly rate) | \$ 493.33 | 6 | \$ 2,960.01 |
| TOTAL FRINGE | | | \$ 2,960.01 |
| TOTAL PERSONNEL | | | \$ 122,983.89 |
| | | | |
| | <i>US Dollars</i> | <i>Unit #/LOE %</i> | TOTAL (12 months) |
| EQUIPMENT | | | |
| TOTAL EQUIPMENT | | | \$ - |
| TRAVEL | | | |
| Domestic Travel | \$ 1,030.90 | 12 | \$ 12,370.84 |
| TOTAL DOMESTIC TRAVEL | | | \$ 12,370.84 |
| International Travel | | | \$ 4,808.00 |
| TOTAL INTERNATIONAL TRAVEL | | | \$ 4,808.00 |
| TOTAL TRAVEL | | | \$ 17,178.84 |
| SERVICES | | | |
| WHGFL Lab Certification | \$ 3,600.00 | 1 | \$ 3,600.00 |
| TOTAL SERVICES | | | \$ 3,600.00 |
| DIAGNOSTICS | | | |
| TBC | \$2,690.37 | 12 | \$32,284.44 |
| TOTAL DIAGNOSTICS | | | \$ 32,284.44 |
| SUPPLIES | | | |
| TBC | \$ 2,690.37 | 12 | \$ 32,284.44 |
| TOTAL SUPPLIES | | | \$ 32,284.44 |
| OTHER COSTS | | | |
| Indirect Costs 8% | \$ 1,388.88 | | \$ 16,666.53 |
| TOTAL OTHER COSTS | | | \$ 16,666.53 |
| Project Costs Total. | | | \$ 224,998.15 |



EcoHealth Alliance

CONTRACT AGREEMENT

NAME: WHO-CC for Research and Training on Viral Zoonoses, Chulalongkorn University

ADDRESS: Rama IV Road, Bangkok, 10330 Thailand

PROJECT TITLE: Understanding Risk of Zoonotic Virus Emergence in EID Hotspots of Southeast Asia

PERIOD: 17 June 2020 – 31 May 2021

PHONE: +962 2 720 1000

EMAIL: (b) (6)

FUNDING SOURCE: NIH/NIAID/CREID/07-049-7012-52338

DUNS NUMBER: 659808836

AGREEMENT AMOUNT: \$215,944.56

This Agreement is by and between EcoHealth Alliance, a United States tax-exempt organization, located at 520 Eighth Avenue, Suite 1200, New York, New York, 10018, and Chulalongkorn University.

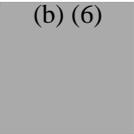
An authorized representative of EcoHealth Alliance has executed the original version of this agreement. Please sign the digital copy and return it via email. If EcoHealth Alliance does not receive a signed digital copy within thirty (30) days of mailing, this agreement may be deemed revoked. This agreement shall be effective only upon the receipt of a signed version by EcoHealth Alliance.

I. TERM AND AMOUNT OF THE AGREEMENT

Subject to the continued availability of funding for this project, the term of this agreement shall be as per the period stated above, renewable for an additional term solely by written agreement between Chulalongkorn University and EcoHealth Alliance.

The amount of the contract as indicated on the preceding page and detailed in **Attachment C: Project Budget** is to be disbursed following receipt of a signed, detailed invoice(s), percentage of effort rate(s), and date(s) worked, or locations and dates for travel and all other details as elaborated in the Financial Responsibilities section below. All deliverables and project details are elaborated in **Attachment B: Scope of Work**.

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II. CONDITIONS OF THE AGREEMENT

The laws of the United States place certain restrictions on the use of funds awarded to organizations by charitable trusts and foundations. Therefore, Chulalongkorn University agrees to the following terms and conditions:

1. **Internal Revenue Code:** Funds awarded by EcoHealth Alliance may not be used for any forbidden political activities or for any purposes prohibited by the United States Internal Revenue Service Code.
2. **Foreign Corrupt Practices Act of 1977: as amended:** Chulalongkorn University agrees to be bound by this act that prohibits individuals and entities from making payments to foreign government officials for the purposes of obtaining business. This includes the offer, either directly or indirectly, of anything of value, to a foreign government official to influence that official in his or hers official capacity to do or omit any act in violation of their official capacity or lawful duty, or to secure any improper advantage in order to assist in obtaining or retaining business for or with, or directing business, to any person.

Chulalongkorn University's directors, officers, employees and agents have not and will not offer, pay, promise or authorize the payment, directly or indirectly through any other person or entity, of any monies or anything of value to any governmental official or employee or any political party or candidate for political office, for the purpose of inducing or rewarding any favorable action or influencing any act or decision of such official or of the government.

Funds in this agreement may not be used to finance the travel, per diem, hotel expenses, meals, conference fees or other conference costs for any member of a foreign government's delegation to an international conference sponsored by a public international organization, except as otherwise agreed upon by EcoHealth Alliance and Chulalongkorn University.

3. **Support for Acts of Terror:** Chulalongkorn University certifies and represent that they will be bound by U.S. anti-terrorism legislation that prohibit having transactions with and providing material support or resources to individuals or groups that engage in or support acts of terror and that Chulalongkorn University does not engage in or support, directly or indirectly, acts of terror.
4. **Financial Conflict of Interest:** Chulalongkorn University certifies and represents that no Significant Financial Conflict of Interest exists regarding PI Ralph Baric participation in this project that would influence their research. They furthermore agree that if such a conflict develops during the course of this project they will promptly notify and disclose that conflict in writing to the EHA Principal Investigator and the EHA Chief financial Officer and may be required to develop a plan of corrective action to resolve that matter. This requirement shall extend to all individuals with managerial oversight of this grant including their spouse and dependent children.
5. **Federal Funding Accountability and Transparency Act:** Chulalongkorn University agrees to fill out **Attachment A: FFATA** and provide EcoHealth Alliance with all information required by this law including, if required, executive compensation data for publication on applicable US

government websites. Chulalongkorn University shall obtain a unique DUNS number from Dun & Bradstreet and shall provide it to EcoHealth Alliance.

6. **Non-Discrimination Policy:** Chulalongkorn University will follow a comprehensive, consistent, and non-discriminatory policy to the extent it can accomplish this goal within the scope of the program objectives.

Chulalongkorn University acknowledges that EcoHealth Alliance is implementing, and over the course of this agreement will continue to implement, reasonable monitoring and oversight to assure the continuing truth of these representations and certifications and that, on request, Chulalongkorn University will provide documentation of the monitoring and oversight of these efforts.

Notwithstanding any term to the contrary, EcoHealth Alliance may terminate this contract with a five (5) business day written notice if it determines that Chulalongkorn University fails to comply with the conditions stated in this contract. In the event of termination, regardless of whether or not termination was due to breach of this contract, EcoHealth Alliance shall pay Chulalongkorn University for all approved expenses prior to the effective date of termination.

III. USE OF FUNDS

The contract monies, including any interest earned, may only be used for the purpose(s) stated in this agreement, as contained in the approved budget in **Attachment C: Project Budget** and detailed in **Attachment B: Scope of Work**.

Funds may not be expended for any other purpose without the prior written approval of EcoHealth Alliance. Should there be a material change in the purpose, character, or method of operation of the agreement, Chulalongkorn University agrees to give prompt and detailed written notice to EcoHealth Alliance. The contract project shall be performed to EcoHealth Alliance's satisfaction as determined by EcoHealth Alliance.

Where appropriate, Chulalongkorn University agrees to conform to accepted animal care and use practices as laid out in the latest IACUC, if applicable, approved by EcoHealth Alliance, and filed with the appropriate regulatory authorities. Chulalongkorn University also agrees to follow all requirements regarding scientific conduct.

IV. NATURE OF RELATIONSHIP

The parties hereto intend by this agreement solely to specify the terms for Chulalongkorn University's use of EcoHealth Alliance contract funds. Nothing in this agreement shall be construed as creating or constituting the relationship of employer and employee between EcoHealth Alliance and Chulalongkorn University or the continuation of funding from EcoHealth Alliance. During the course of completing the contract project work, Chulalongkorn University remains a distinct and separate legal entity from that of EcoHealth Alliance.

Chulalongkorn University agrees to conform to the laws and regulations of the location in which they operate and obtain all required permits, agreements and insurance required by local authorities. They

also agree to pay all fees and taxes levied on this project by applicable political authorities or designated subdivisions.

V. REPORTING REQUIREMENTS

Chulalongkorn University agrees to fulfill the program scope of services and reporting requirements that are incorporated into this agreement and detailed in **Attachment B: Scope of Work**.

VI. PHOTOGRAPHS AND VIDEO

EcoHealth Alliance shall own and have the right to use the recorded media (photos, video, audio) notwithstanding any licenses or other rights granted to Chulalongkorn University herein. Chulalongkorn University shall retain the unrestricted right to use the recorded media (photos, video, audio) for publication and for educational and research purposes. EcoHealth Alliance grants to Chulalongkorn University an irrevocable, royalty-free, non-transferable, non-exclusive right and license to use, reproduce, make derivative works, display, and perform publicly any material first developed and delivered under this contract.

VII. PUBLICATION REVIEW AND APPROVAL

At least thirty (30) days prior to the publication of any written work made possible by this EcoHealth Alliance contract agreement, or involving data or information gained in whole or in part from research or activity conducted under this agreement, a copy of such work must be sent to EcoHealth Alliance for pre-publication review and recommendations for revision by EcoHealth Alliance. Chulalongkorn University is under no obligation to make any changes to the requested publication, except to delete Confidential Information within the EcoHealth Alliance review period. EcoHealth Alliance will respond within thirty (30) days of notification. All published work must recognize EcoHealth Alliance or as may be otherwise determined by EcoHealth Alliance and required by the parent award from NIH/NIAID in the acknowledgements. Written work that is not approved by EcoHealth Alliance may not recognize EcoHealth Alliance in the acknowledgements.

VIII. EVALUATION OF THE AGREEMENT

At its own expense, EcoHealth Alliance may monitor and conduct an evaluation of operations under this contract agreement. Evaluation may include visits to Chulalongkorn University by representatives of EcoHealth Alliance in order to observe and discuss the funded project.

IX. DISBURSEMENT OF FUNDS

Unless otherwise stated below, contract funds shall be disbursed by EcoHealth Alliance based on the following criteria:

1. Chulalongkorn University shall submit a valid invoice to EcoHealth Alliance indicating the services performed, as well as the time period covered by the invoice. Chulalongkorn University should attach all supporting documentation needed to substantiate any out-of-pocket expenses.
2. Chulalongkorn University must sign the invoice as certification that the services rendered, and all expenses incurred have been pursuant to the scope of service contained in this agreement.

3. EcoHealth Alliance will invoice the funding source for the value of the invoice and remit the funds to Chulalongkorn University in a timely manner.
4. EcoHealth Alliance reserves the right to delay payment of any funds due to insufficient documentation submitted by Chulalongkorn University.
5. Chulalongkorn University acknowledges that all invoices must be submitted to EcoHealth Alliance no more than 45-days after the end of the contract. Invoices submitted after these periods may not be invoiced to the funding source and may not be paid to Chulalongkorn University.

Unless otherwise directed, EcoHealth Alliance shall remit US funds by bank wire made payable to Chulalongkorn University. The legal name of Chulalongkorn University, who must be the sole owner of the account, must appear on the account. Chulalongkorn University shall provide the following banking information to EcoHealth Alliance:

Organization Name: Chula Unisearch, Chulalongkorn University
Bank Name: Bangkok Bank Public Company Limited (BBL)
394 Rama 1 Rd. Phatumwan Bangkok 10330 Thailand
Branch: Siam Square
Account Number: [REDACTED]
Swift code: [REDACTED]

X. SUBCONTRACTOR 'S FINANCIAL RESPONSIBILITIES

As applicable, Chulalongkorn University agrees to adhere to all requirements contained in OMB Circular A-122 during the term of the agreement. Chulalongkorn University acknowledges responsibility for A-133 Federal Audit requirements for funds received under this agreement and will provide EcoHealth Alliance a copy of their most current A-133 or similar audit report as may be provided. Chulalongkorn University agrees that all overhead charged to this grant shall not exceed the amount permitted by the federal indirect cost rate in effect during the performance period. Chulalongkorn University shall provide EcoHealth Alliance with a copy of their most current federal indirect cost rate agreement. If requested, Chulalongkorn University will provide EcoHealth Alliance with a copy of a most current audit report. Chulalongkorn University agrees to keep systematic records of all expenditures relating to this agreement. A quarterly financial report is required along with a signed invoice for services and reimbursement of expenses. Documentation of expenses, consisting of bills, invoices, receipts, logbooks (acceptable only for gasoline for cars and boats), etc., must be retained by Chulalongkorn University for five (5) years after the close of the agreement period and must be available for inspection by representatives of EcoHealth Alliance at any time during this period. EcoHealth Alliance may, at its own expense, examine, audit, or have audited the records of Chulalongkorn University insofar as they relate to activities supported by this agreement.

Chulalongkorn University budget records must be itemized in the following categories, as applicable:

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1. Salary or stipend – detailed by person, rate, date, and amount. Pay stubs or signed acknowledgement of receipt for stipend may be requested as documentation for personnel expenses.
2. Fringe – as applicable, same as above
3. Equipment – an original or copy (when original is not available) of all receipts or purchase orders must be provided with financial reports for all capital equipment items (items costing \$5,000 or above). **Please note that capital equipment purchases require EHA approval.**
4. Domestic Travel – trip cost indicating departure/arrival dates, air/car/train/boat costs, and accommodation cost per person along with all boarding passes and other receipts (including receipt for lodging). For vehicle –associated costs, mileage to be indicated along with any associated costs: driver, repairs, insurance, etc. Detailed logbooks (including dates, times, and signatures) are acceptable when signed by both Subrecipient and EHA or responsible party. **Includes meals in transit.** All domestic travel lodging, meal, and incidental expenses must be within United States Government per diem rates.
5. International Travel – same as above.
6. Purchased services (e.g., field asst., boat hire) – detailed at the level above.
7. Diagnostics – cost of testing, incl. lab disposables, labor (if not included above), use of equipment, etc.
8. Field Supplies – receipts must be supplied for all items.
9. Other – any other items that do not fall into the categories above with same level of detail

Chulalongkorn University shall submit detailed invoices to EcoHealth Alliance detailing actual expenditures compared to the approved budget or contract total. Invoices are subject to review and approval of EcoHealth Alliance’s principal investigator and/or grants and programs manager who shall certify that all expenses are in conformity with the award.

EcoHealth Alliance reserves the right to request documentation of all costs incurred as part of its normal practices in the use of federal funds.

XI. PURCHASE OF CAPITAL EQUIPMENT

All capital equipment, items valued over US \$5,000 and with a useful life of three years or more, purchased with agreement money remains the property of EcoHealth Alliance. The equipment shall be returned to EcoHealth Alliance at the end of the project, at the expense of EcoHealth Alliance unless EcoHealth Alliance agrees, in writing, to relinquish title to the equipment. Chulalongkorn University agrees to use this equipment solely for the purposes of this project and to maintain it in proper working order. For all such items, a completed Capital Equipment Inventory must be submitted to EcoHealth Alliance at the conclusion of the project.

XII. UNUSED FUNDS

Chulalongkorn University agrees to return to EcoHealth Alliance at the conclusion of the agreement period all agreement funds that have not been used to complete the project. Chulalongkorn University may not use agreement funds after the end of the agreement period without the written consent of EcoHealth Alliance unless both University of North Carolina at Chapel Hill and EcoHealth Alliance agree to an extension of this contract and both parties sign this in the form of an amendment.

XIII. REVOCATION AND REVERSION

With 30 day's notification and if EcoHealth Alliance determines at its sole discretion that continuation of the project is no longer in the best interests of EcoHealth Alliance, EcoHealth Alliance retains the right to cancel all unpaid installments of the agreement and to require Chulalongkorn University to repay all portions of the agreement that are within Chulalongkorn University's control. In addition, EcoHealth Alliance may require Chulalongkorn University to refund to EcoHealth Alliance funds that EcoHealth Alliance considers have been misused or misappropriated. Circumstances that may cause EcoHealth Alliance to revoke the agreement or demand repayment include, but are not limited to:

1. Material changes in the purpose, character, or method of operation of the agreement;
2. Contract agreement application or any required report is found by EcoHealth Alliance to be inaccurate in any material respect;
3. EcoHealth Alliance determines that Chulalongkorn University has failed to perform any of the terms of this agreement; and
4. Chulalongkorn University in the judgment of EcoHealth Alliance has misused EcoHealth Alliance's name or otherwise harmed the reputation of EcoHealth Alliance.

XIV. INSURANCE AND LIABILITY

By accepting the terms and conditions of this agreement, Chulalongkorn University also accepts full responsibility for any and all insurance needs, such as medical, vehicle, evacuation, etc. for themselves and all other project related personnel, unless a separate arrangement has been made between EcoHealth Alliance and Chulalongkorn University. By signing this agreement, Chulalongkorn University relieves EcoHealth Alliance from any and all liability due to accident or injury, or any other claims that may result from any activities conducted by Chulalongkorn University in relation to the contract project.

XV. ADDITIONAL SUPPORT

In making this contract agreement, EcoHealth Alliance assumes no obligation to provide other or additional support to Chulalongkorn University.

XVI. NOTICE

All correspondence and project reports should include the reference log number and follow the reporting guidelines described above. Copies should be directed to:

Dr. Aleksei Chmura
EcoHealth Alliance
520 Eighth Avenue, Suite 1200
New York, NY 10018
(t) 1.212.380.4460
(e) (b) (6)

XVII. INDEMNIFICATION

Chulalongkorn University and EcoHealth Alliance hereby mutually agree to indemnify and hold each other, respectively, and each other's affiliates, officers, employees, successors and assigns, harmless from and against claims, demands, actions, proceedings, investigation and right of action including

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attorney's whether action is instituted or not and, if instituted, whether at any trial or appellate level, whether raised by the other party or a third party, arising from the intentional and/or negligent acts, errors or omissions of Chulalongkorn University or EcoHealth Alliance to the extent permitted by applicable law.

XVIII. PARTIAL INVALIDITY

If any term or provision of this agreement to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this agreement shall not be affected thereby and shall be valid and enforceable to the fullest extent permitted by law.

XIX. Biosafety

Laboratory

- EcoHealth Alliance will review and evaluate the lab biosafety at project research sites, provide annual trainings, and conduct laboratory inspections as needed.
- All partner laboratories are required to submit applicable approval documents from their Institutional Biosafety Committees (IBC) to EcoHealth Alliance for review following signed contracts, to ensure the compliance with *NIH and CDC guidelines* (link below) or comparable. No laboratory work may be conducted without confirmed receipt by EcoHealth Alliance of these documents.
- Biosafety review and evaluation for all partner laboratories will be conducted following the *NIH and CDC Guidelines* (link below) or comparable.
- Any accident or concern related to work funded under this award must be reported to EcoHealth Alliance and your Institutional Biosafety Committee (IBC) within 72 hours and will be investigated by an independent auditor. Work will be suspended immediately until an investigation is completed to the satisfaction of EcoHealth Alliance.

NIH Guidelines: https://www.dropbox.com/s/sa0g11uyfrnl39t/NIH_Guidelines%202019.pdf?dl=0

CDC Laboratory Biosafety Manual:

<https://www.dropbox.com/s/bp1g59x6bq18eh1/CDC%20Biosafety%20Guidelines.pdf?dl=0>

Field

- EcoHealth Alliance will have oversight of the field work biosafety, provide training, and enforcing biosafety regulations in the field for all work with animals.
- In-country Institutional Animal Care and use Committee (IACUC) and Institutional Review Board (IRB) approvals to work with wild animals and human subjects are required to submitted to EcoHealth Alliance following signed contracts. No fieldwork may be conducted without confirmed receipt by EcoHealth Alliance of these approvals.
- Review and approval will be conducted globally and locally with the IACUCs and IRBs.
- Field biosafety trainings will be conducted every other year or more frequently as necessary. Online refresher trainings will be made available every year for all members of teams working with wild animals, humans, and relevant specimens.

XX. OTHER PROVISIONS

This agreement may not be transferred or assigned by either party without the prior written consent of the other, and any breach of this prohibition will deem the agreement null and void.

Both parties agree that either party may terminate this agreement following confirmation of a 30 day notice to the other party. Ecohealth Alliance will reimburse Chulalongkorn University for all approved costs incurred up to the point of termination.

Each party represents and warrants that its authorized agent(s) have duly executed this agreement on its behalf.

This agreement constitutes a single integrated contract expressing the entire agreement of the parties hereto. There are no other agreements, written or oral, express or implied, between the parties hereto, concerning the subject matter hereof, except the agreements set forth in this agreement. Any amendment to this agreement is effective only if set forth in writing and signed by both parties.

(b) (6)

Dr. Peter Daszak
President, EcoHealth Alliance

(b) (6)

(Supichai Tangjaitrong, Ph.D.)
Managing Director
Chula Unisearch, Chulalongkorn University
Grants Manager & Team Lead, Chulalongkorn University



10 December 2020
DATE

12 December 2020
DATE

ATTACHMENT A: FFATA

The Federal Funding Accountability and Transparency Act (FFATA) was signed on September 26, 2006 and requires information on federal awards (federal financial assistance and expenditures) be made available to the public via a single, searchable website, which is www.USASpending.gov. All contractors receiving funds from EcoHealth Alliance are required to provide the following information as a condition of receiving funds.

Please answer the following questions Yes or No.

a. In the previous tax year, was your company's gross income from all sources above \$300,000?

Yes No

b. In Chulalongkorn University's business or organization's preceding completed fiscal year, did its business or organization (the legal entity to which the DUNS number it provided belongs) receive (1) 80 percent or more of its annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; **and** (2) \$25,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?

Yes No

c. Does the public have access to information about the compensation of the executives in Chulalongkorn University's business or organization (the legal entity to which the DUNS number it provided belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?

Yes No

d. Does your business or organization maintain an active registration in the System for Award Management (www.SAM.gov)?

Yes No

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ATTACHMENT B: Scope of Work Year 1 (17 June 2020 – 31 May 2021)

Under this contract, supervised and coordinated by the co-Investigators Dr. Supaporn Wacharapluesadee and Dr. Thiravat Hemachudha, the Thai Red Cross Emerging Infectious Diseases Health Science Centre (TRC-EID), Chulalongkorn Hospital, Faculty of Medicine, Chulalongkorn University will:

- 1. Work with the EID-SEARCH global team to develop work plan to:**
 - 1.1 Identify the surveillance sites for animal, human community, and hospital syndromic study
 - Work with the modelling team at EHA to identify the surveillance sites, targeted animal species, targeted sample sizes, for Coronaviruses, Paramyxoviruses, and Filoviruses.
 - 1.2 Develop protocol and questionnaires for community and hospital syndromic surveillance
 - 1.3 Pilot the questionnaire in country and provide feedbacks
- 2. Obtain local research approval document including:**
 - 2.1 Chulalongkorn University Animal Care and Use Protocol (CU-ACUP) approval for animal investigation
 - 2.2 Institutional Review Board (IRB) approval for human subject research
 - 2.3 Institutional Biosafety Committee (IBC) approval for lab work
 - 2.4 Permissions for animal capture
- 3. Laboratory testing**
 - 3.1 Full genome characterization of previously identified CoVs in animals. This could also include full Spike protein sequencing for CoVs (e.g. if full genome capture doesn't work) (n=10-20)
 - 3.2 Investigations of archived specimens from undiagnosed human infections available at Chula WHO-CC by performing available PCR and/or serological testing (n>100) for coronaviruses, influenza, filoviruses, and paramyxoviruses or NGS.
 - 3.3 For newly collected animal specimens, if applicable, complete viral family PCR testing of coronaviruses, influenza, filoviruses, paramyxoviruses and conduct DNA barcoding for confirmation of field species identification as necessary on a subset of the specimens.
 - 3.4 Collaborating with EID-SEARCH partner for the validation of newly developed serological assays.
- 4. Conduct scoping survey and initial wild animal surveillance at selected sites**
 - 4.1 Scoping survey on human-animal interfaces at selected site, and possibly pilot the questionnaire in Ratchaburi province (one site)
 - 4.2 Start initial specimen collection from bat, rodent, and macaque individuals (1 rectal swab + 1 swab/individual) in the province of Ratchaburi (one site; 300 animals including 100 each of bat, rodent and macaque).
- 5. Results and data sharing, analysis, reporting**
 - 5.1 Sharing of specimens will ONLY be possible for diagnostic purposes when capacity is not available in Thailand, or when it's part of the capacity building and training program.
 - 5.2 Participate in the CREID Working Group discussions and work with EID-SEARCH global team to develop data management and sharing policies.
 - 5.3 Maintain current contacts to whom results will be reported at in-country government ministries responsible for human health, livestock/agriculture, and wildlife.
 - 5.4 Collaborate with the EID-SEARCH global team for data cleaning, analysis, interpretation and contribute to scientific publications as agreed.

5.5 Complete the following programmatic and financial reporting by requested deadlines:

- Annual reports to NIAID
- Quarterly invoices and financial reports
- Other reports requested by NIAID

5.6 Reach out to communities and present appropriately available findings and public health information

6. Communication

6.1 Participate on calls with the EID-SEARCH global team at EHA as requested; hold regular team calls as agreed.

6.2 Represent EID-SEARCH on planning and other relevant meetings.

7. Project Timeline

| ACTIVITIES | YEAR 1 | | | | YEAR 2 | | | | YEAR 3 | | | | YEAR 4 | | | | YEAR 5 | | | |
|--------------------------------------|--------|----|----|----|--------|----|----|----|--------|----|----|----|--------|----|----|----|--------|----|----|----|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| 1.4.a. sampling targets | | | | | | | | | | | | | | | | | | | | |
| 1.4.b. sample size justifications | | | | | | | | | | | | | | | | | | | | |
| 1.4.c. sample collection & testing | | | | | | | | | | | | | | | | | | | | |
| 1.4.d. NGS | | | | | | | | | | | | | | | | | | | | |
| 1.4.e. sequencing Spike GP | | | | | | | | | | | | | | | | | | | | |
| 1.5.a. human cell infection | | | | | | | | | | | | | | | | | | | | |
| 1.5.b. receptor binding | | | | | | | | | | | | | | | | | | | | |
| 1.5.c. host-pathogen dynamics | | | | | | | | | | | | | | | | | | | | |
| 1.5.d. viral strain prioritization | | | | | | | | | | | | | | | | | | | | |
| 1.5.e. animal models | | | | | | | | | | | | | | | | | | | | |
| 2.4 target population & sample sizes | | | | | | | | | | | | | | | | | | | | |
| 2.5 community data collection | | | | | | | | | | | | | | | | | | | | |
| 2.6.a serological testing | | | | | | | | | | | | | | | | | | | | |
| 2.6.b RT-PCR testing | | | | | | | | | | | | | | | | | | | | |
| 2.6.c virus characterization | | | | | | | | | | | | | | | | | | | | |
| 2.7 epidemiological analysis | | | | | | | | | | | | | | | | | | | | |
| 3.4.a cohort selection | | | | | | | | | | | | | | | | | | | | |
| 3.4.b clinic enrollment & follow-up | | | | | | | | | | | | | | | | | | | | |
| 3.4.c clinical data collection | | | | | | | | | | | | | | | | | | | | |
| 3.5 sample testing | | | | | | | | | | | | | | | | | | | | |
| 3.6 risk characterization | | | | | | | | | | | | | | | | | | | | |
| annual meeting | | | | | | | | | | | | | | | | | | | | |

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ATTACHMENT C: PROJECT BUDGET

| | |
|---|--------------|
| Items | |
| Personnel | \$55,666.67 |
| Travel | |
| 1. Site scoping / pilot questionnaire for community study | \$10,780.00 |
| 2. Animal sampling | \$16,551.00 |
| Diagnosis | |
| 1. Full genome characterization of archived CoV positive animal specimens (NGS) | \$32,391.00 |
| 2. Investigation of undiagnosed archived human specimens (family PCR and NGS) | \$21,560.00 |
| 3. Animal study (300 animals x 1 site) 3 viral families | \$63,000.00 |
| Total direct cost | 199,948.67 |
| Indirect cost (8%) | \$15,995.89 |
| Total | \$215,944.56 |

Financial arrangements

| | Deliverable | Amount |
|---|------------------------|---------------|
| 1 | Countersigned Contract | \$25,000.00 |
| 2 | Progress Report-1 | \$110,000.00 |
| 3 | Progress Report-2 | \$55,944.56 |
| 4 | Annual Report | \$25,000.00 |

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POWER OF ATTORNEY

August 3, 2020

We, Chulalongkorn University represented by Professor Dr. Bundhit Eua-arporn, President of Chulalongkorn University, do hereby empower Dr. Supichai Tangjaitrong, Managing Director of Chula Unisearch, Chulalongkorn University, to be authorized lawful attorney to represent the organization for submission of “WHO-CC for Research and Training on Viral Zoonoses, Chulalongkorn University” including any acts performed under this circumstance.

Signed _____ (b) (6) _____ Principal

(Professor Bundhit Eua-arporn, Ph.D.)
President
Chulalongkorn University

Signed _____ (b) (6) _____ Attorney

(Supichai Tangjaitrong, Ph.D.)
Managing Director
Chula Unisearch, Chulalongkorn University

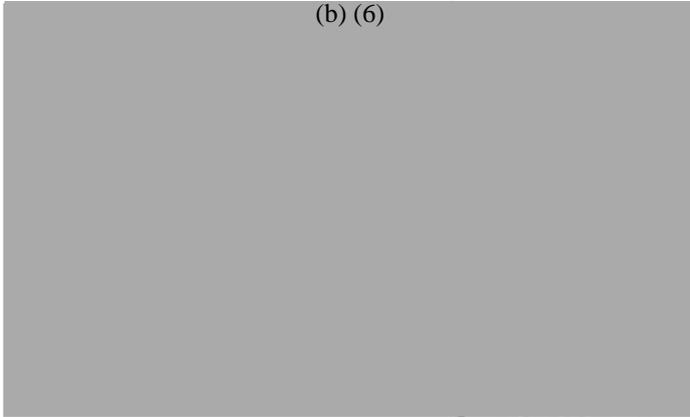
Signed _____ (b) (6) _____ Witness

(Mr. Torsak Purksaritanont)
Manager
Department of Office Administration

Signed _____ (b) (6) _____ Witness

(Mrs. Kitiya Jumpa)
Legal Officer

(b) (6)



This ED Copy is only for Chula



ศาสตราจารย์ประจำตัวเจ้าหน้าที่ของรัฐ



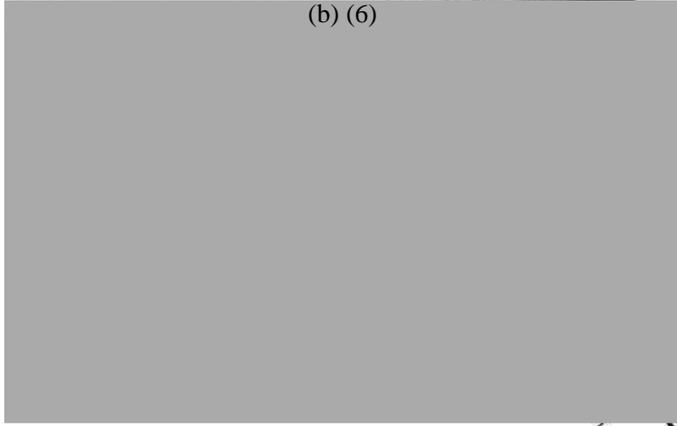
จุฬาลงกรณ์มหาวิทยาลัย กระทรวงศึกษาธิการ

Certified by

(b) (6)

(Prof. Bundhit Eua-arporn, PhD.)

(b) (6)



This ID. Copy only for Chula Unisearch's Project

(b) (6)



ประเทศไทย
THAILAND

รับรองสำเนาถูกต้อง

(b) (6)

ดร.สุรัชย์ ตั้งใจตรง
(กรรมการผู้อำนวยการ)



CONTRACT AGREEMENT

| | |
|-------------------|--|
| NAME: | Duke-NUS Medical School |
| ADDRESS: | 8 College Road, Singapore, 169857 |
| PROJECT TITLE | Understanding Risk of Zoonotic Virus Emergence in EID Hotspots of Southeast Asia |
| PERIOD | 17 June 2020 – 31 May 2022 |
| PHONE: | (b) (6) |
| EMAIL: | (b) (6) |
| FUNDING SOURCE: | 07-126-7012-52338 |
| DUNS NUMBER: | 595192253 |
| AGREEMENT AMOUNT: | \$108,006.48 |

This Contract Agreement (“**Agreement**”) is by and between EcoHealth Alliance, a United States tax-exempt organization, located at 520 Eighth Avenue, Suite 1200, New York, New York, 10018 (hereinafter referred to as “EHA”), and National University Of Singapore, a public company limited by guarantee and having its registered office at 21 Lower Kent Ridge Road, Singapore 119077, acting through its Duke-NUS Medical School, located at 8 College Road, Singapore 169857 (hereinafter referred to as “Duke-NUS”)

An authorized representative of EHA has executed the original version of this Agreement. Please sign the digital copy and return it via email. This Agreement shall be effective only upon its execution by EHA and Duke-NUS.

I. TERM AND AMOUNT OF THE AGREEMENT

Subject to the continued availability of funding for this project, the term of this Agreement shall be as per the period stated above, renewable for an additional term solely by written agreement between Duke-NUS and EHA.

The amount of the contract as indicated on the preceding page and detailed in Attachment C: Project Budget is to be disbursed following receipt of a official, detailed invoice(s), percentage of effort rate(s), and date(s) worked, or locations and dates for travel and all other details as elaborated in the Financial Responsibilities section below, or subject to availability of funds a \$25,000 advance to be spent on agreed project expenses. All deliverables and project details are elaborated in Attachment B: Scope of Work.

II. CONDITIONS OF THE AGREEMENT

The laws of the United States place certain restrictions on the use of funds awarded to organizations by charitable trusts and foundations. Therefore, Duke-NUS agrees to the following terms and conditions:

1. **Internal Revenue Code:** Funds awarded by EHA may not be used for any forbidden political activities or for any purposes prohibited by the United States Internal Revenue Service Code.
2. **Foreign Corrupt Practices Act of 1977: as amended:** To the extent applicable to Duke-NUS, Duke-NUS agrees to comply with this Act that prohibits individuals and entities from making payments to foreign government officials for the purposes of obtaining business. This includes the offer, either directly or indirectly, of anything of value, to a foreign government official to influence that official in his or hers official capacity to do or omit any act in violation of their official capacity or lawful duty, or to secure any improper advantage in order to assist in obtaining or retaining business for or with, or directing business, to any person.

Duke-NUS' directors, officers, employees and agents have not and will not offer, pay, promise or authorize the payment, directly or indirectly through any other person or entity, of any monies or anything of value to any governmental official or employee or any political party or candidate for political office, for the purpose of inducing or rewarding any favorable action or influencing any act or decision of such official or of the government.

Funds in this Agreement may not be used to finance the travel, per diem, hotel expenses, meals, conference fees or other conference costs for any member of a foreign government's delegation to an international conference sponsored by a public international organization, except as otherwise agreed upon by EHA and Duke-NUS.

3. **Support for Acts of Terror:** Duke-NUS shall not enter into transactions with and provide material support or resources to individuals or groups that engage in or support acts of terror and Duke-NUS represents that it does not engage in or support, directly or indirectly, acts of terror.
4. **Financial Conflict of Interest:** Duke-NUS certifies and represents that no significant financial conflict of interest exists regarding participation in this project that would influence the research. They furthermore agree that if such a conflict develops during the course of this project they will promptly notify and disclose that conflict in writing to the EHA Principal Investigator and the EHA

Chief financial Officer and may be required to develop a plan of corrective action to resolve that matter. This requirement shall extend to all individuals with managerial oversight of this grant including their spouse and dependent children.

5. **Federal Funding Accountability and Transparency Act:** Duke-NUS agrees to fill out Attachment A: FFATA and provide applicable US government website(s) (sam.gov) with all information required by this law.
6. **Non-Discrimination Policy:** Duke-NUS will follow a comprehensive, consistent, and non-discriminatory policy to the extent it can accomplish this goal within the scope of the project objectives.

Duke-NUS acknowledges that EHA is implementing, and over the course of this Agreement will continue to implement, reasonable monitoring and oversight to assure the continuing truth of these representations and certifications and that, on request, Duke-NUS will provide documentation of the monitoring and oversight of these efforts.

Notwithstanding any term to the contrary, either Party may terminate this Agreement with immediate effect by giving written notice to the other Party upon occurrence of any of the following:

- (a) where the other Party commits a breach of any material term of this Agreement that is incapable of remedy;
- (b) where the other Party commits a breach of any material term of this Agreement is capable of remedy, and is not remedied within thirty (30) days from the date of written notice from the terminating Party to remedy such breach;
- (c) where the other Party enters into liquidation (except for the purposes of a bona fide reconstruction or amalgamation), or has an administrator, receiver or manager appointed over any part of its assets or undertaking, or makes any arrangement with its creditors, or ceases to carry on business;
- (d) where the other Party commits any act of criminal breach of trust, dishonesty, corruption or fraud;
- (e) where the project funding or any part thereof has not been paid when due or where the other Party fails to pay any monies under this Agreement which has been properly incurred and remains due and owing to the Terminating Party.

In the event of termination of this Agreement, regardless of whether termination was due to breach of this Agreement, EHA shall reimburse Duke-NUS for all approved expenses prior to the effective date of termination.

III. USE OF FUNDS

The contract monies, including any interest earned, may only be used for the purpose(s) stated in this Agreement, as contained in the approved budget in Attachment C: and detailed in Attachment B: Scope of Work.

Funds may not be expended for any other purpose without the prior written approval of EHA. Should there be a material change in the purpose, character, or method of operation of the Agreement, Duke-NUS Medical School agrees to give prompt and detailed written notice to EHA. The contract project shall be performed in accordance with Attachment B: Scope of Work.

Where appropriate, Duke-NUS agrees to conform to accepted animal care and use practices as laid out in the latest animal ethics licenses, as applicable and approved by EHA and filed with the appropriate regulatory authorities. Duke-NUS also agrees to follow all requirements regarding scientific conduct.

IV. NATURE OF RELATIONSHIP

The parties hereto intend by this Agreement solely to specify the terms for Duke-NUS' use of EHA contract funds. Nothing in this Agreement shall be construed as creating or constituting the relationship of employer and employee between EHA and Duke-NUS or the continuation of funding from EHA. During the course of completing the contract project work, Duke-NUS remains a distinct and separate legal entity from that of EHA.

Duke-NUS agrees to conform to the laws and regulations of the location in which they operate and obtain all required permits, agreements and insurance required by local authorities. They also agree to pay all fees and taxes levied on this project by applicable political authorities or designated subdivisions utilizing the funds of this agreement.

V. REPORTING REQUIREMENTS

Duke-NUS agrees to fulfill the program scope of services and reporting requirements that are incorporated into this Agreement and detailed in Attachment B: Scope of Work.

VI. CONFIDENTIALITY; PROPRIETARY INFORMATION AND DATA

- (a) The parties agree that all information and records exchanged in connection with this Agreement ("Confidential Information") shall be treated as strictly confidential, and shall not be used or disclosed for any purpose other than the performance of the Agreement and implementation of the Project. This confidentiality obligation shall continue in force for a period of three (3) years from the date of expiry or early termination of this Agreement.
- (b) Unless stated otherwise herein or agreed to in writing and signed by both parties, nothing contained in this Agreement shall, by express grant, implication, estoppel or otherwise, convey to either party any right, title, interest, or license in the inventions, patents, trademarks (including logos), technical data, computer software, or software documentation of the other party.

EHA and Duke-NUS retain equal rights to and ownership of any and all media (photos, video, audio recorded by the Duke-NUS as related to this Project) developed with respect to this Agreement and the implementation of the Project.

Any publication of media must credit EHA and Duke-NUS.

Intellectual property rights arising from the project will be co-owned by EHA and Duke-NUS as tenants in common in equal and undivided shares ("Joint Project IPR"). The Parties shall have rights to make joint applications for the protection of the Joint Project IPR and to determine the commercial exploitation of the same. Before any protection or commercialisation of any Joint Project IPR takes place, the Parties shall proceed diligently to negotiate in good faith and agree on the terms and conditions for protection and commercialisation of any Joint Project IPR in a definitive written agreement.

Further, the Duke-NUS shall also adhere to EHA's other IP-sharing agreements insofar as they relate to data and products derived from work described in this Agreement, e.g. sharing agreements with local in-country partners including but not limited to government agencies, NGOs and universities. EHA may provide details of data sharing agreements with other parties upon request from the Duke-NUS.

Each Party shall comply with all laws and subsidiary legislation applicable to privacy and data protection in its country with regard to any and all personal data collected, obtained and/or held by it in connection with this Agreement.

The provisions of this paragraph (b) shall survive the expiration or earlier termination of this Agreement.

VII. PUBLICATION REVIEW AND APPROVAL

The parties agree that prior to the publication of any written work made possible by Agreement, or involving data or information gained in whole or in part from research or activity conducted under this Agreement, a copy of such work must be shared for pre-publication review and recommendations for revision. The parties are under no obligation to make any changes to the requested publication, except to delete Confidential Information and intellectual property requiring protection. The parties will respond with their recommendations for revision within thirty (30) days of receipt of the proposed publication. All published work must recognize EHA and Duke-NUS, and as required by the parent award NIAID in the acknowledgements. Written work that is not approved by EHA may not recognize EHA or NIAID in the acknowledgements.

VIII. EVALUATION OF THE AGREEMENT

At its own expense, EHA may monitor and conduct an evaluation of operations under this Agreement. Evaluation may include visits to Duke-NUS by representatives of EHA to observe and discuss the funded project.

IX. DISBURSEMENT OF FUNDS

Unless otherwise stated below, contract funds shall be disbursed by EHA based on the following criteria:

1. Duke-NUS shall submit a valid invoice to EHA indicating the services performed, as well as the time covered by the invoice. Duke-NUS should attach all supporting documentation needed to substantiate any out-of-pocket expenses.
2. Duke-NUS must provide official invoices as certification that the services rendered, and all expenses incurred have been pursuant to the scope of service contained in this Agreement.
3. EHA will invoice the funding source for the value of the invoice and remit the funds to Duke-NUS in a timely manner.
4. EHA reserves the right to delay payment of any funds due to insufficient documentation submitted by Duke-NUS.

5. Duke-NUS acknowledges that all invoices must be submitted to EHA no more than 45-days after the end of this Agreement. Invoices submitted after these periods may not be invoiced to the funding source and may not be paid to Duke-NUS.

Unless otherwise directed, EHA shall remit US funds by bank wire made payable to Duke-NUS. EHA shall follow the banking details provided on the invoice to make payment to Duke-NUS.

X. SUBCONTRACTOR 'S FINANCIAL RESPONSIBILITIES

As applicable, Duke-NUS Medical School agrees to adhere to all requirements contained in OMB Circular A-136 during the term of this Agreement. Duke-NUS Medical School acknowledges responsibility for A-136 Federal Audit requirements for funds received under this Agreement and will provide EHA a copy of their most current audit report as may be provided. Duke-NUS agrees that all overhead charged to this grant shall not exceed the amount permitted by the applicable or *de minimus* federal indirect cost rate in effect during the performance period. If applicable, Duke-NUS shall provide EHA with a copy of their most current US federal indirect cost rate agreement. If requested, Duke-NUS will provide EHA with a copy of a most current audit report. Duke-NUS agrees to keep systematic records of all expenditures relating to this Agreement. A quarterly financial report is required along with a signed invoice for services and reimbursement of expenses. Documentation of expenses, consisting of bills, invoices, receipts, logbooks (acceptable only for gasoline for cars and boats), etc., must be retained by Duke-NUS for five (5) years after the end or early termination of the Agreement period and must be available for inspection by representatives of EHA at any time during this period; provided that EHA provides reasonable prior notice to Duke-NUS and all such documentation disclosed to EHA shall be deemed as Duke-NUS' Confidential Information. EHA may, at its own expense, examine, audit, or have audited the records of Duke-NUS insofar as they relate to activities supported by this Agreement.

Duke-NUS budget records must be itemized in the following categories, as applicable:

1. Salary or stipend – detailed by person, rate, date, and amount. Pay stubs or signed acknowledgement of receipt for stipend may be requested as documentation for personnel expenses.
2. Fringe – as applicable, same as above
3. Equipment – an original or copy (when original is not available) of all receipts or purchase orders must be provided with financial reports for all capital equipment items (items costing \$5,000 or above). **Please note that capital equipment purchases require EHA approval.**
4. Domestic Travel – trip cost indicating departure/arrival dates, air/car/train/boat costs, and accommodation cost per person along with all boarding passes and other receipts (including receipt for lodging). For vehicle –associated costs, mileage to be indicated along with any associated costs: driver, repairs, insurance, etc. Detailed logbooks (including dates, times, and signatures) are acceptable when signed by both Subrecipient and EHA or responsible party. **Includes meals in transit.** All domestic travel lodging, meal, and incidental expenses must be within United States Government per diem rates.
5. International Travel – same as above. **Please note that international travel requires EHA approval.**
6. Purchased services (e.g., field asst., boat hire) – detailed at the level above.
7. Diagnostics – cost of testing, incl. lab disposables, labor (if not included above), use of equipment, etc.
8. Field Supplies – receipts must be supplied for all items.

9. Other – any other items that do not fall into the categories above with same level of detail

Duke-NUS Medical School shall submit detailed invoices to EHA detailing actual expenditures compared to the approved budget or contract total. Invoices are subject to review and approval of EHA's principal investigator and/or grants and programs manager who shall certify that all expenses are in conformity with the award.

EHA reserves the right to request documentation of all costs incurred as part of its normal practices in the use of federal funds.

XI. PURCHASE OF CAPITAL EQUIPMENT

For all capital equipment (items valued over US \$5,000 and with a useful life of one year or more) purchased under this agreement, a completed Capital Equipment Inventory must be submitted to EHA at the end of the Term (including any approved extensions). Duke-NUS Medical School agrees to use this equipment for other projects or programs only with EHA approval and so long as such use does not interfere with the Project work for which it was originally acquired. Duke-NUS also agrees to maintain it in proper working order.

All supply purchases over \$3,000 for a single item require the prior approval of EHA.

XII. UNUSED FUNDS

Duke-NUS Medical School agrees to return to EHA at the conclusion of the Agreement period all funds that have not been used to complete the project, excluding the indirect funds. Duke-NUS may not use funds after the end of the Agreement period without the written consent of EHA unless both Duke-NUS and EHA agree to an extension of this Agreement and both parties sign this in the form of an amendment.

XIII. REVOCATION AND REVERSION

With 30 day's notification and if EHA determines at its sole discretion that continuation of the project is no longer its best interests, EHA retains the right to terminate this Agreement; provided that EHA shall pay Duke-NUS for all approved expenses prior to the effective date of termination. EHA may require Duke-NUS to refund to EHA funds that it reasonably considers have been misused or misappropriated. Circumstances that may cause EHA to revoke the Agreement or demand repayment include, but are not limited to:

1. Material changes in the purpose, character, or method of operation of the Agreement without prior written consent from both parties;
2. Any required report and supporting documentation is found by EHA to be inaccurate in any material respect;
3. EHA determines that Duke-NUS Medical School has failed to perform any of the terms of this Agreement within thirty (30) days written notice; and
4. Duke-NUS in the judgment of EHA has misused EHA's name or otherwise harmed the reputation of EHA.

XIV. INSURANCE AND LIABILITY

By accepting the terms and conditions of this agreement, Duke-NUS also accepts full responsibility for all insurance needs, such as medical, vehicle, evacuation, etc. for its personnel involved in the project, unless a separate arrangement has been made between EHA and Duke-NUS. By signing this Agreement, Duke-NUS shall be responsible for the conduct of its personnel in performing the project.

XV. ADDITIONAL SUPPORT

In making this Agreement, EHA assumes no obligation to provide any other additional support to Duke-NUS.

XVI. NOTICE

All correspondence and project reports should include the reference log number and follow the reporting guidelines described above. Copies should be directed to:

Dr. Aleksei Chmura
EcoHealth Alliance
520 Eighth Avenue, Suite 1200
New York, NY 10018
(t) 1.212.380.4460
(e) (b) (6)

XVII. WARRANTY AND LIABILITY

Duke-NUS Medical School and EcoHealth Alliance hereby mutually agree to indemnify and hold each other, respectively, and each other's affiliates, officers, employees, successors and assigns, harmless from and against claims, demands, actions, proceedings, investigation and right of action, including reasonable attorneys' fees and costs, whether action is instituted or not and, if instituted, whether at any trial or appellate level, whether raised by the other party or a third party, arising from the intentional acts, errors or omissions of Duke-NUS Medical School or EcoHealth Alliance.

For the avoidance of doubt, EHA agrees to indemnify and hold the Duke-NUS and successors harmless from and against any claim arising from and relating to the funds flowing into Singapore for the purposes of and in connection with this Agreement, provided that the Duke-NUS shall remain liable for tax obligations, if any.

All intellectual property rights, findings, project results, reports and materials provided by any Party under this Agreement are provided "as-is" and without any representation or warranty, express or implied, including, without limitation, any implied warranty of merchantability or fitness for any particular purpose, or any warranty that any use thereof will not infringe or violate any patent or other proprietary rights of any other person.

Nothing in this Agreement shall limit or exclude the liability of a Party in respect of:

- (a) death or personal injury caused by such Party's negligence; and
- (b) any liability which arose in the course of such Party's performance of this Agreement and which cannot be limited or excluded by law.

To the extent permitted by law, neither Party is liable to the other Party for any loss of profits or revenue, loss of goodwill or reputation, loss of production, or business interruption costs, any exemplary or punitive damages, or any type of indirect, consequential, special or incidental loss, damage or expense arising out of or relating to this Agreement regardless of the form of action, whether in contract, tort (including negligence) or otherwise, even if that Party has been advised of the possibility of the same.

The maximum aggregate liability of each Party to the other Party for any claims (including all reasonable legal costs and expenses on a full indemnity basis) arising from any breach or acts or omission in the performance of this Agreement, or arising out of the subject matter of this Agreement, regardless of the form of action, whether in contract, tort (including negligence) or otherwise, shall not exceed USD 108,000.

The provisions of this Clause XVII shall survive the early termination or expiration of this Agreement.

XVIII. PARTIAL INVALIDITY

If any term or provision of this Agreement to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this Agreement shall not be affected thereby and shall be valid and enforceable to the fullest extent permitted by law.

XIX. Biosafety

Laboratory

- EHA will review and evaluate the lab biosafety at project research sites, provide annual trainings, and conduct laboratory inspections as needed.
- All partner laboratories are required to submit applicable approval documents from their Institutional Biosafety Committees (IBC) to EHA for review following the execution of this Agreement, to ensure the compliance with *NIH and CDC guidelines* (link below) or comparable. No laboratory work may be conducted without confirmed receipt by EHA of these documents.
- Biosafety review and evaluation for all partner laboratories will be conducted following the *NIH and CDC Guidelines* (link below) or comparable.
- Any accident or concern related to work funded under this award must be reported to EHA and your Institutional Biosafety Committee (IBC) within 72 hours and will be investigated by an independent auditor. Work will be suspended immediately until an investigation is completed to the satisfaction of EHA.

NIH Guidelines: https://www.dropbox.com/s/sa0g11uyfrnl39t/NIH_Guidelines%202019.pdf?dl=0

CDC Laboratory Biosafety Manual:

<https://www.dropbox.com/s/bp1g59x6bq18ehl/CDC%20Biosafety%20Guidelines.pdf?dl=0>

Field

- EHA will have oversight of the field work biosafety, provide training, and enforcing biosafety regulations in the field for all work with animals.
- In-country Institutional Animal Care and use Committee (IACUC) and Institutional Review Board (IRB) approvals to work with wild animals and human subjects are required to be submitted to EHA following execution of this Agreement. No fieldwork may be conducted without confirmed receipt by EHA of these approvals.

- Review and approval will be conducted globally and locally with the IACUCs and IRBs.
- Field biosafety trainings will be conducted every other year or more frequently as necessary. Online refresher trainings will be made available every year for all members of teams working with wild animals, humans, and relevant specimens.

XX. OTHER PROVISIONS

This Agreement may not be transferred or assigned by either party without the prior written consent of the other, and any breach of this prohibition will deem the Agreement null and void.

Both parties agree that either party may terminate this Agreement following confirmation of a 30 day notice to the other party. EHA will reimburse Duke-NUS for all approved costs incurred up to the point of termination.

Each party represents and warrants that its authorized agent(s) have duly executed this Agreement on its behalf.

This Agreement constitutes a single integrated contract expressing the entire agreement of the parties hereto. There are no other agreements, written or oral, express, or implied, between the parties hereto, concerning the subject matter hereof, except the agreements set forth in this Agreement. Any amendment to this Agreement is effective only if set forth in writing and signed by both parties.

Each Party shall, without the prior written consent of the other Party, not:

- (a) use the name, logo, symbol or mark of the other Party for any purpose; and
- (b) publish any press releases, publicity, advertisements or marketing materials in any medium concerning all or any part of the discussions under the Project or this Agreement.

Notwithstanding the generality of the above, the Parties may notify third parties of the fact that this Agreement is in effect but not the terms of this Agreement.

This Agreement shall be governed by and construed in accordance with the laws of the state of New York of the United States of America, for as far as it does not conflict with the laws of the Singapore or obliges Duke-NUS to perform acts that may be regarded as unlawful in Singapore law.

Any dispute or claim arising from or in connection with this Agreement (the “**Dispute**”), including any question regarding its existence, validity, breach or termination, shall first be referred to authorised representatives of the Parties at the least senior level for amicable settlement through good faith negotiations. If the Dispute cannot be so settled within thirty (30) days of referral, the Dispute shall be submitted to the Parties’ respective authorised senior management representatives for resolution within thirty (30) days of submission. Any Dispute which cannot be so resolved shall be finally resolved by arbitration administered by the Singapore International Arbitration Centre (the “**SIAC**”) in accordance with the Arbitration Rules of the SIAC for the time being in force, which rules are deemed to be incorporated by reference in this Clause. The seat of the arbitration shall be Singapore. The tribunal shall consist of one (1) arbitrator. The language of the arbitration shall be English.

The provisions in this Clause XX shall survive the early termination or expiration of this Agreement.

/s/ 

Dr. Peter Daszak
President, EcoHealth Alliance

Professor Thomas Coffman
Dean, Duke-NUS Medical School

27 July 2021
DATE

DATE

The provisions in this Clause XX shall survive the early termination or expiration of this Agreement.

(b) (6)

Dr. Peter Dászak
President, EcoHealth Alliance

27 July 2021

DATE

DocuSigned by:
(b) (6)
6171998CA6D3471...

Professor Thomas Coffman
Dean, Duke-NUS Medical School

19 August 2021

DATE

Attachment A: FFATA

The Federal Funding Accountability and Transparency Act (FFATA) was signed on September 26, 2006 and requires information on federal awards (federal financial assistance and expenditures) be made available to the public via a single, searchable website, which is www.USASpending.gov. All contractors receiving funds from EHA are required to provide the following information as a condition of receiving funds.

Please answer the following questions Yes or No.

- a. In the previous tax year, was your company's gross income from all sources above \$300,000?

Yes No

- b. In Duke-NUS's business or organization's preceding completed fiscal year, did its business or organization (the legal entity to which the DUNS number it provided belongs) receive (1) 80 percent or more of its annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; **and** (2) \$25,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?

Yes No

- c. Does the public have access to information about the compensation of the executives in Duke-NUS's business or organization (the legal entity to which the DUNS number it provided belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?

Yes No

- d. Does your business or organization maintain an active registration in the System for Award Management (www.SAM.gov)?

Yes No

Attachment B: Scope of Work

Under the supervisor and coordination of Co-Investigator Dr. Linfa Wang, working close with the post-doctoral associate, the work will be implemented at the Duke-NUS Medical School to conduct studies on the epidemiology, characterization, and pathogenesis of a series of coronaviruses (CoVs), paramyxoviruses (PMVs – particularly Henipaviruses) and filoviruses (FVs), including:

- Develop molecular and serology platforms for lab diagnostics of collected human and animal samples, including the generation of reagents for novel assays;
- Characterize newly discovered viruses of interest in collaboration with in-country teams;
- Provide training to Thailand and Malaysia laboratory staff for technology transfer and serological and molecular protocols;
- Collaborate with the EID-SEARCH global team for data analysis, interpretation and contribute to scientific publications as agreed;
- Participate calls with the CREID network, and communicate regularly with EID-SEARCH global team at EHA as agreed;
- Contribute to the annual report and other programmatic report requested by NIAID;
- Represent EID-SEARCH on planning and other relevant meetings;
- Complete quarterly invoices and/or financial reports

Attachment C: Project Budget

| | 17 Jun 20 - 31 May 22 |
|------------------------------|-----------------------|
| EOM | USD |
| Research fellow | 65,000.00 |
| Sub-total (EOM) | 65,000.00 |
| | |
| OOE | |
| Materials and Supplies | 15,500.00 |
| Others - Scientific services | 14,500.00 |
| Foreign Travel Costs | 5,006.00 |
| Sub-total (OOE) | 35,006.00 |
| | |
| Total direct costs | 100,006.00 |
| 8% F&A | 8,000.48 |
| Total project costs | 108,006.48 |



CONTRACT AGREEMENT

NAME: The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc.

ADDRESS: 6720-A Rockledge Drive, Suite 100, Bethesda, Maryland, 20817

PROJECT TITLE Understanding Risk of Zoonotic Virus Emergence in EID Hotspots of Southeast Asia

PERIOD 17 June 2020 – 31 May 2021

PHONE: +1.240.694.4040

EMAIL: (b) (6)

FUNDING SOURCE: NIH/NIAID/CREID/07-049-7012-52338

DUNS NUMBER: 144676566

AGREEMENT AMOUNT: \$114,372.02

This Agreement is by and between EcoHealth Alliance, a United States tax-exempt organization, located at 520 Eighth Avenue, Suite 1200, New York, New York, 10018, and The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc.

An authorized representative of EcoHealth Alliance has executed the original version of this agreement. Please sign the digital copy and return it via email. If EcoHealth Alliance does not receive a signed digital copy within thirty (30) days of mailing, this agreement may be deemed revoked. This agreement shall be effective only upon the receipt of a signed version by EcoHealth Alliance.

I. TERM AND AMOUNT OF THE AGREEMENT

Subject to the continued availability of funding for this project, the term of this agreement shall be as per the period stated above, renewable for an additional term solely by written agreement between The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. and EcoHealth Alliance.

The amount of the contract as indicated on the preceding page and detailed in **Attachment C: Project Budget** is to be disbursed following receipt of a signed, detailed invoice(s), percentage of effort rate(s), and date(s) worked, or locations and dates for travel and all other details as elaborated in the Financial Responsibilities section below. All deliverables and project details are elaborated in **Attachment B: Scope of Work**.

II. CONDITIONS OF THE AGREEMENT

The laws of the United States place certain restrictions on the use of funds awarded to organizations by charitable trusts and foundations. Therefore, The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. agrees to the following terms and conditions:

1. **Internal Revenue Code:** Funds awarded by EcoHealth Alliance may not be used for any forbidden political activities or for any purposes prohibited by the United States Internal Revenue Service Code.
2. **Foreign Corrupt Practices Act of 1977: as amended:** The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. agrees to be bound by this act that prohibits individuals and entities from making payments to foreign government officials for the purposes of obtaining business. This includes the offer, either directly or indirectly, of anything of value, to a foreign government official to influence that official in his or hers official capacity to do or omit any act in violation of their official capacity or lawful duty, or to secure any improper advantage in order to assist in obtaining or retaining business for or with, or directing business, to any person.

The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc.'s directors, officers, employees and agents have not and will not offer, pay, promise or authorize the payment, directly or indirectly through any other person or entity, of any monies or anything of value to any governmental official or employee or any political party or candidate for political office, for the purpose of inducing or rewarding any favorable action or influencing any act or decision of such official or of the government.

Funds in this agreement may not be used to finance the travel, per diem, hotel expenses, meals, conference fees or other conference costs for any member of a foreign government's delegation to an international conference sponsored by a public international organization, except as otherwise agreed upon by EcoHealth Alliance and The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc.

3. **Support for Acts of Terror:** The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. certifies and represent that they will be bound by U.S. anti-terrorism legislation that prohibit having transactions with and providing material support or resources to individuals or groups that engage in or support acts of terror and that The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. does not engage in or support, directly or indirectly, acts of terror.
4. **Financial Conflict of Interest:** The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. certifies and represents that no Significant Financial Conflict of Interest exists regarding Dr. Christopher Broder participation in this project that would influence their research. They furthermore agree that if such a conflict develops during the course of this project they will promptly notify and disclose that conflict in writing to the EHA Principal Investigator and the EHA Chief financial Officer and may be required to develop a plan of corrective action to resolve that matter. This requirement shall extend to all individuals with managerial oversight of this grant including their spouse and dependent children.

5. **Federal Funding Accountability and Transparency Act:** The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. agrees to fill out **Attachment A: FFATA** and provide EcoHealth Alliance with all information required by this law including, if required, executive compensation data for publication on applicable US government websites. The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. shall obtain a unique DUNS number from Dun & Bradstreet and shall provide it to EcoHealth Alliance.
6. **Non-Discrimination Policy:** The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. will follow a comprehensive, consistent, and non-discriminatory policy to the extent it can accomplish this goal within the scope of the program objectives.

The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. acknowledges that EcoHealth Alliance is implementing, and over the course of this agreement will continue to implement, reasonable monitoring and oversight to assure the continuing truth of these representations and certifications and that, on request, The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. will provide documentation of the monitoring and oversight of these efforts.

Notwithstanding any term to the contrary, EcoHealth Alliance may terminate this contract with a -thirty (30) business day written notice if it determines that The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. fails to comply with the conditions stated in this contract and fails to cure such breach after an additional thirty (30) business day written notice to cure. In the event of termination, regardless of whether or not termination was due to breach of this contract, EcoHealth Alliance shall pay The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. for all incurred and non-cancellable expenses prior to the effective date of termination.

III. USE OF FUNDS

The contract monies, including any interest earned, may only be used for the purpose(s) stated in this agreement, as contained in the approved budget in **Attachment C: Project Budget** and detailed in **Attachment B: Scope of Work**.

Funds may not be expended for any other purpose without the prior written approval of EcoHealth Alliance. Should there be a material change in the purpose, character, or method of operation of the agreement, The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. agrees to give prompt and detailed written notice to EcoHealth Alliance. The contract project shall be performed to EcoHealth Alliance's satisfaction as determined by EcoHealth Alliance.

Where appropriate, The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. agrees to conform to accepted animal care and use practices as laid out in the latest IACUC, if applicable, approved by EcoHealth Alliance, and filed with the appropriate regulatory authorities. The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. also agrees to follow all requirements regarding scientific conduct.

IV. NATURE OF RELATIONSHIP

The parties hereto intend by this agreement solely to specify the terms for The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc.'s use of EcoHealth Alliance contract funds.

Nothing in this agreement shall be construed as creating or constituting the relationship of employer and employee between EcoHealth Alliance and The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. or the continuation of funding from EcoHealth Alliance. During the course of completing the contract project work, The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. remains a distinct and separate legal entity from that of EcoHealth Alliance

The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. agrees to conform to the laws and regulations of the location in which they operate and obtain all required permits, agreements and insurance required by local authorities. They also agree to pay all fees and taxes levied on this project by applicable political authorities or designated subdivisions.

V. REPORTING REQUIREMENTS

The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. agrees to fulfill the program scope of services and reporting requirements that are incorporated into this agreement and detailed in **Attachment B: Scope of Work**.

VI. PHOTOGRAPHS AND VIDEO

EcoHealth Alliance shall own and have the right to use the recorded media (photos, video, audio) notwithstanding any licenses or other rights granted to The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. herein. The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. shall retain the unrestricted right to use the recorded media (photos, video, audio) for publication and for educational and research purposes. EcoHealth Alliance grants to The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. an irrevocable, royalty-free, non-transferable, non-exclusive right and license to use, reproduce, make derivative works, display, and perform publicly any material first developed and delivered under this contract.

VII. PUBLICATION REVIEW AND APPROVAL

At least thirty (30) days prior to the publication of any written work made possible by this EcoHealth Alliance contract agreement, or involving data or information gained in whole or in part from research or activity conducted under this agreement, a copy of such work must be sent to EcoHealth Alliance for pre-publication review and recommendations for revision by EcoHealth Alliance. The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. is under no obligation to make any changes to the requested publication, except to delete Confidential Information within the EcoHealth Alliance review period. EcoHealth Alliance will respond within thirty (30) days of notification. All published work must recognize EcoHealth Alliance or as may be otherwise determined EcoHealth Alliance and required by the parent award from NIH/NIAID in the acknowledgements. Written work that is not approved by EcoHealth Alliance may not recognize EcoHealth Alliance in the acknowledgements.

VIII. EVALUATION OF THE AGREEMENT

At its own expense, EcoHealth Alliance may monitor and conduct an evaluation of operations under this contract agreement. Evaluation may include visits to The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. , during business hours and with advanced written notice and

approval by HJF, by representatives of EcoHealth Alliance in order to observe and discuss the funded project.

IX. DISBURSEMENT OF FUNDS

Unless otherwise stated below, contract funds shall be disbursed by EcoHealth Alliance based on the following criteria:

1. The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. shall submit a valid invoice to EcoHealth Alliance indicating the services performed, as well as the time period covered by the invoice. The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. should attach all supporting documentation needed to substantiate any out-of-pocket expenses.
2. The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. must sign the invoice as certification that the services rendered, and all expenses incurred have been pursuant to the scope of service contained in this agreement.
3. EcoHealth Alliance will invoice the funding source for the value of the invoice and remit the funds to The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. 30 days net of invoice..
4. EcoHealth Alliance reserves the right to delay payment of any funds due to insufficient documentation submitted by The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc.
5. The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. acknowledges that all invoices must be submitted to EcoHealth Alliance no more than 60-days after the end of the contract. Invoices submitted after these periods may not be invoiced to the funding source and may not be paid to The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc.

Unless otherwise directed, EcoHealth Alliance shall remit US funds by bank wire made payable to The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. The legal name of The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., who must be the sole owner of the account, must appear on the account. The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. shall provide the following banking information to EcoHealth Alliance:

| | |
|---------------------------|---|
| Organization Name: | The Henry M. Jackson Foundation Operating Account |
| Bank Name: | Bank of America |
| Bank Address: | 730 15 th Street, NW, Washington, DC 20005 |
| Account Number: | [REDACTED] |
| ABA Code: | [REDACTED] |
| Bank Telephone: | XXXXXXXXXX |

X. SUBCONTRACTOR 'S FINANCIAL RESPONSIBILITIES

As applicable, The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. agrees to adhere to all requirements contained in OMB Circular A-122 during the term of the agreement. The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. acknowledges responsibility for A-133 Federal Audit requirements for funds received under this agreement and will provide EcoHealth Alliance a copy of their most current A-133 or similar audit report as may be provided. The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. agrees that all overhead charged to this grant shall not exceed the amount permitted by the federal indirect cost rate in effect during the performance period. The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. shall provide EcoHealth Alliance with a copy of their most current federal indirect cost rate agreement. If requested, The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. will provide EcoHealth Alliance with a copy of a most current audit report. The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. agrees to keep systematic records of all expenditures relating to this agreement. A quarterly financial report is required along with a signed invoice for services and reimbursement of expenses. Documentation of expenses, consisting of bills, invoices, receipts, logbooks (acceptable only for gasoline for cars and boats), etc., must be retained by The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. for five (5) years after the close of the agreement period and must be available for inspection by representatives of EcoHealth Alliance at a mutually agreeable time during this period. EcoHealth Alliance may, at its own expense, examine, audit, or have audited the records of The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. insofar as they relate to activities supported by this agreement.

The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. budget records must be itemized in the following categories, as applicable:

1. Salary or stipend – detailed by person, rate, date, and amount
2. Field Equipment – an original or copy (when original is not available) of all receipts or purchase orders must be provided with detailed and regular financial reports for all field equipment items.
3. Purchased services (e.g., field asst., boat hire) – detailed at the level of numbers 1 & 2, above. Detailed logbooks (including dates, times, and signatures) are acceptable when signed by both the Henry M. Jackson Foundation for the advancement of Military Medicine, Inc. and EHA or responsible party.
4. Vehicle associated costs – mileage to be indicated along with any associated costs: driver, repairs, insurance, etc. Detailed logbooks (including dates, times, and signatures) are acceptable when signed by the Henry M. Jackson Foundation for the advancement of Military Medicine, Inc. and EHA or responsible party.
5. Travel – trip cost indicating departure/arrival dates and air/car/train/boat costs along with all boarding passes and receipts.
6. Accommodation – location and amounts per person along with all lodging receipts.
7. Other – any other items that do not fall into the categories above with same level of detail.

The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. shall submit detailed invoices to EcoHealth Alliance detailing actual expenditures compared to the approved budget or contract total. Invoices are subject to review and approval of EcoHealth Alliance's principal investigator and/or grants and programs manager who shall certify that all expenses are in conformity with the award.

EcoHealth Alliance reserves the right to request documentation of all costs incurred as part of its normal practices in the use of federal funds.

XI. PURCHASE OF CAPITAL EQUIPMENT

All capital equipment, items valued over US \$5,000 and with a useful life of three years or more, purchased with agreement money remains the property of EcoHealth Alliance. The equipment shall be returned to EcoHealth Alliance at the end of the project, at the expense of EcoHealth Alliance unless EcoHealth Alliance agrees, in writing, to relinquish title to the equipment. The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. agrees to use this equipment solely for the purposes of this project and to maintain it in proper working order at EcoHealth Alliance's expense. For all such items, a completed Capital Equipment Inventory must be submitted to EcoHealth Alliance at the conclusion of the project.

XII. UNUSED FUNDS

The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. agrees to return to EcoHealth Alliance at the conclusion of the agreement period all agreement funds that have not been used to complete the project. The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. may not use agreement funds after the end of the agreement period without the written consent of EcoHealth Alliance unless both the Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. and EcoHealth Alliance agree to an extension of this contract and both parties sign this in the form of an amendment.

XIII. REVOCATION AND REVERSION

With 30 day's notification and if, for cause, EcoHealth Alliance retains the right to cancel all unpaid installments of the agreement. Circumstances that may cause EcoHealth Alliance to revoke the agreement or demand repayment include, but are not limited to:

1. Material changes in the purpose, character, or method of operation of the agreement;
2. Contract agreement application or any required report is found by EcoHealth Alliance to be inaccurate in any material respect;
3. EcoHealth Alliance determines that The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. has materially failed to perform any of the terms of this agreement; and
4. The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. in the judgment of EcoHealth Alliance has misused EcoHealth Alliance's name or otherwise harmed the reputation of EcoHealth Alliance.

XIV. INSURANCE AND LIABILITY

By accepting the terms and conditions of this agreement, The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. also accepts full responsibility for any and all insurance needs, such as medical, vehicle, evacuation, etc. for, HJF employees unless a separate arrangement has been made between EcoHealth Alliance and The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc.

XV. ADDITIONAL SUPPORT

In making this contract agreement, EcoHealth Alliance assumes no obligation to provide other or additional support to The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc.

XVI. NOTICE

All correspondence and project reports should include the reference log number and follow the reporting guidelines described above. Copies should be directed to:

Dr. Aleksei Chmura
EcoHealth Alliance
520 Eighth Avenue, Suite 1200
New York, NY 10018
(t) 1.212.380.4460
(e) (b) (6)

XVII. LIABILITY

The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. and EcoHealth Alliance hereby mutually agree to be liable for their own negligent acts, errors or omissions EcoHealth acknowledges that the Principal Investigator for this award is Dr. Christopher Broder, who is employed by the United States Government with his office located at the Uniformed Services University of Health Sciences. For the avoidance of doubt, it is understood and agreed that no third parties, including government personnel, are agents of HJF or authorized to legally bind HJF for any purpose. To the extent authorized under the provisions of the Federal Tort Claims Act, including 28 U.S.C. sections 2671-2680, the United States Government will be liable for any loss, claim, damage, or expense caused by the negligent or wrongful act or omission of any employee of the Department of Defense or any member of the United States Armed Forces while acting within the scope of his or her office or employment.

XVIII. PARTIAL INVALIDITY

If any term or provision of this agreement to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this agreement shall not be affected thereby and shall be valid and enforceable to the fullest extent permitted by law.

XIX. Biosafety

Laboratory

- EcoHealth Alliance will review and evaluate the lab biosafety at project research sites, provide annual trainings, and conduct laboratory inspections as needed.
- All partner laboratories are required to submit applicable approval documents from their Institutional Biosafety Committees (IBC) to EcoHealth Alliance for review following signed contracts, to ensure the compliance with *NIH and CDC guidelines* (link below) or comparable. No laboratory work may be conducted without confirmed receipt by EcoHealth Alliance of these documents.
- Biosafety review and evaluation for all partner laboratories will be conducted following the *NIH and CDC Guidelines* (link below) or comparable.
- Any accident or concern related to work funded under this award must be reported to EcoHealth Alliance and your Institutional Biosafety Committee (IBC) within 72 hours and will be investigated by

an independent auditor. Work will be suspended immediately until an investigation is completed to the satisfaction of EcoHealth Alliance.

NIH Guidelines: https://www.dropbox.com/s/sa0g11uyfrnl39t/NIH_Guidelines%202019.pdf?dl=0

CDC Laboratory Biosafety Manual:

<https://www.dropbox.com/s/bp1g59x6bq18ehl/CDC%20Biosafety%20Guidelines.pdf?dl=0>

Field

- EcoHealth Alliance will have oversight of the field work biosafety, provide training, and enforcing biosafety regulations in the field for all work with animals.
- In-country Institutional Animal Care and use Committee (IACUC) and Institutional Review Board (IRB) approvals to work with wild animals and human subjects are required to submitted to EcoHealth Alliance following signed contracts. No fieldwork may be conducted without confirmed receipt by EcoHealth Alliance of these approvals.
- Review and approval will be conducted globally and locally with the IACUCs and IRBs.
- Field biosafety trainings will be conducted every other year or more frequently as necessary. Online refresher trainings will be made available every year for all members of teams working with wild animals, humans, and relevant specimens.

XX. OTHER PROVISIONS

This agreement may not be transferred or assigned by either party without the prior written consent of the other, and any breach of this prohibition will deem the agreement null and void.

Both parties agree that either party may terminate this agreement following confirmation of a 30 day notice to the other party. Ecohealth Alliance will reimburse the Henry M. Jackson Foundation for the advancement of Military Medicine, Inc. for all approved costs incurred up to the point of termination.

Each party represents and warrants that its authorized agent(s) have duly executed this agreement on its behalf.

This agreement constitutes a single integrated contract expressing the entire agreement of the parties hereto. There are no other agreements, written or oral, express or implied, between the parties hereto, concerning the subject matter hereof, except the agreements set forth in this agreement. Any amendment to this agreement is effective only if set forth in writing and signed by both parties.

(b) (6)

Dr. Peter Daszak
President, EcoHealth Alliance

Yongkang Qiu

Yongkang Qiu
Grants Manager
Research Administration
The Henry M. Jackson Foundation for the
Advancement of Military Medicine, Inc.

Digitally signed by Yongkang Qiu
DN: dc=org, dc=hjf, dc=ad, ou=HQ, ou=Users,
ou=Research Administration, ou=OSP,
cn=Yongkang Qiu, email=(b) (6)
Date: 2021.02.22 13:33:47 -05'00'

Feb 23, 2021
DATE

2/22/2021
DATE

ATTACHMENT A: FFATA

The Federal Funding Accountability and Transparency Act (FFATA) was signed on September 26, 2006 and requires information on federal awards (federal financial assistance and expenditures) be made available to the public via a single, searchable website, which is www.USASpending.gov. All contractors receiving funds from EcoHealth Alliance are required to provide the following information as a condition of receiving funds.

Please answer the following questions Yes or No.

- a. In the previous tax year, was your company's gross income from all sources above \$300,000?

Yes No

- b. In The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc.'s business or organization's preceding completed fiscal year, did its business or organization (the legal entity to which the DUNS number it provided belongs) receive (1) 80 percent or more of its annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; **and** (2) \$25,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?

Yes No

- c. Does the public have access to information about the compensation of the executives in The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc.'s business or organization (the legal entity to which the DUNS number it provided belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?

Yes No

- d. Does your business or organization maintain an active registration in the System for Award Management (www.SAM.gov)?

Yes No

ATTACHMENT B: Scope of Work

Under the supervisor and coordination of Co-Investigators Dr. Christopher Broder and Dr. Eric Laing, working close with the post-doctoral associate, the work will be implemented at The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. on the epidemiology and characterization of a series of coronaviruses (CoVs), paramyxoviruses (PMVs – particularly Henipaviruses) and filoviruses (FVs), including:

- Develop molecular and serology platforms for lab diagnostics of collected human and animal samples, including the generation of reagents for novel assays;
- Provide training to Thailand and Malaysia laboratory staff for technology transfer and serological and molecular protocols;
- Collaborate with the EID-SEARCH global team for data analysis, interpretation and contribute to scientific publications as agreed;
- Participate calls with the CREID network, and communicate regularly with EID-SEARCH global team at EHA as agreed;
- Contribute to the annual report and other programmatic report requested by NIAID;
- Represent EID-SEARCH on planning and other relevant meetings;
- Complete quarterly invoices and/or financial reports

ATTACHMENT C: PROJECT BUDGET

| SALARY | | Y1 |
|---------------------------------|-----------------|----------------------|
| Christopher Broder | Co-Investigator | \$ - |
| Eric Laing | Co-Investigator | \$ - |
| TBD | Research Asst. | \$ 5,400.00 |
| TOTAL SALARY | | \$ 5,400.00 |
| FRINGE | 30.76% | \$ 1,660.99 |
| TOTAL SALARY + FRINGE | | \$ 7,060.99 |
| TRAVEL | | |
| Domestic | | \$ 3,500.00 |
| International | | \$ 18,500.00 |
| TOTAL TRAVEL | | \$ 22,000.00 |
| OTHER DIRECT COSTS | | |
| Materials & Supplies | | \$ 41,439.00 |
| AKTA Service Contract | | \$ 4,500.00 |
| TOTAL OTHER DIRECT COSTS | | \$ 45,939.00 |
| TOTAL DIRECT | | \$ 74,999.99 |
| INDIRECT | 30.45% | \$ 22,837.50 |
| G&A | 16.90% | \$ 16,534.53 |
| TOTAL | | \$ 114,372.02 |

HJF EID-SEARCH Contract_v2 Clean version (008) final

Final Audit Report

2021-02-23

| | |
|-----------------|---|
| Created: | 2021-02-23 |
| By: | Hongying Li (b) (6) |
| Status: | Signed |
| Transaction ID: | CBJCHBCAABAAAnV-aZv0LBnNussxXwGOBC9LRoJWFkHII |

"HJF EID-SEARCH Contract_v2 Clean version (008) final" History

 Document digitally presigned by Yongkang Qiu (b) (6)
2021-02-22 - 6:33:47 PM GMT- IP address: (b) (6)

 Document created by Hongying Li (b) (6)
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2021-02-23 - 4:04:15 AM GMT

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 Document e-signed by Peter Daszak (b) (6)
Signature Date: 2021-02-23 - 2:40:21 PM GMT - Time Source: server- IP address: (b) (6)

 Agreement completed.
2021-02-23 - 2:40:21 PM GMT



CONTRACT AGREEMENT

NAME: The University of North Carolina at Chapel Hill

ADDRESS: 104 Airport Dr Suite 2200
Campus Box 1350
Chapel Hill, NC 27599-1350

PROJECT TITLE Understanding Risk of Zoonotic Virus Emergence in EID Hotspots of Southeast Asia

PERIOD 17 June 2020 – 31 May 2021

PHONE: +1.919.966.3895

EMAIL: [REDACTED]@unc.edu

FUNDING SOURCE: NIH/NIAID/CREID/07-049-7012-52338

DUNS NUMBER: 608195277

AGREEMENT AMOUNT: \$194,375.00

This Agreement is by and between EcoHealth Alliance, a United States tax-exempt organization, located at 520 Eighth Avenue, Suite 1200, New York, New York, 10018, and the University of North Carolina at Chapel Hill.

An authorized representative of EcoHealth Alliance has executed the original version of this agreement. Please sign the digital copy and return it via email. If EcoHealth Alliance does not receive a signed digital copy within thirty (30) days of mailing, this agreement may be deemed revoked. This agreement shall be effective only upon the receipt of a signed version by EcoHealth Alliance.

I. TERM AND AMOUNT OF THE AGREEMENT

Subject to the continued availability of funding for this project, the term of this agreement shall be as per the period stated above, renewable for an additional term solely by written agreement between the University of North Carolina at Chapel Hill and EcoHealth Alliance.

The amount of the contract as indicated on the preceding page and detailed in **Attachment C: Project Budget** is to be disbursed according to the Disbursement of Funds section below and all other details as elaborated in the Financial Responsibilities section below. All deliverables and project details are elaborated in **Attachment B: Scope of Work**.

II. CONDITIONS OF THE AGREEMENT

The laws of the United States place certain restrictions on the use of funds awarded to organizations by charitable trusts and foundations. Therefore, the University of North Carolina at Chapel Hill agrees to the following terms and conditions:

1. **Internal Revenue Code:** Funds awarded by EcoHealth Alliance may not be used for any forbidden political activities or for any purposes prohibited by the United States Internal Revenue Service Code.
2. **Foreign Corrupt Practices Act of 1977: as amended:** The University of North Carolina at Chapel Hill agrees to be bound by this act that prohibits individuals and entities from making payments to foreign government officials for the purposes of obtaining business. This includes the offer, either directly or indirectly, of anything of value, to a foreign government official to influence that official in his or hers official capacity to do or omit any act in violation of their official capacity or lawful duty, or to secure any improper advantage in order to assist in obtaining or retaining business for or with, or directing business, to any person.

The University of North Carolina at Chapel Hill's directors, officers, employees and agents have not and will not offer, pay, promise or authorize the payment, directly or indirectly through any other person or entity, of any monies or anything of value to any governmental official or employee or any political party or candidate for political office, for the purpose of inducing or rewarding any favorable action or influencing any act or decision of such official or of the government.

Funds in this agreement may not be used to finance the travel, per diem, hotel expenses, meals, conference fees or other conference costs for any member of a foreign government's delegation to an international conference sponsored by a public international organization, except as otherwise agreed upon by EcoHealth Alliance and the University of North Carolina at Chapel Hill.

3. **Support for Acts of Terror:** The University of North Carolina at Chapel Hill certifies and represent that they will be bound by U.S. anti-terrorism legislation that prohibit having transactions with and providing material support or resources to individuals or groups that engage in or support acts of terror and that the University of North Carolina at Chapel Hill does not engage in or support, directly or indirectly, acts of terror.
4. **Financial Conflict of Interest:** The University of North Carolina at Chapel Hill certifies and represents that no Significant Financial Conflict of Interest exists regarding PI Ralph Baric participation in this project that would influence their research. They furthermore agree that if such a conflict develops during the course of this project they will promptly notify and disclose that conflict in writing to the EHA Principal Investigator and the EHA Chief financial Officer and may be required to develop a plan of corrective action to resolve that matter. This requirement shall extend to all named personnel related to this project.
5. **Federal Funding Accountability and Transparency Act:** The University of North Carolina at Chapel Hill agrees to fill out **Attachment A: FFATA** and provide EcoHealth Alliance with all information required by this law including, if required, executive compensation data for

publication on applicable US government websites. The University of North Carolina at Chapel Hill shall obtain a unique DUNS number from Dun & Bradstreet and shall provide it to EcoHealth Alliance.

6. **Non-Discrimination Policy:** The University of North Carolina at Chapel Hill will follow a comprehensive, consistent, and non-discriminatory policy to the extent it can accomplish this goal within the scope of the program objectives.

The University of North Carolina at Chapel Hill acknowledges that EcoHealth Alliance is implementing, and over the course of this agreement will continue to implement, reasonable monitoring and oversight to assure the continuing truth of these representations and certifications and that, on reasonable request, the University of North Carolina at Chapel Hill will provide documentation of the monitoring and oversight of these efforts.

Notwithstanding any term to the contrary, EcoHealth Alliance may terminate this contract with a thirty (30) business day written notice if it determines that the University of North Carolina at Chapel Hill fails to comply with the conditions stated in section II of this contract and the University of North Carolina at Chapel Hill has not cured such breach within the thirty (30) day period. In the event of termination, regardless of whether or not termination was due to breach of this contract, EcoHealth Alliance shall pay the University of North Carolina at Chapel Hill for all approved expenses and non-cancellable obligations made prior to the effective date of termination.

III. USE OF FUNDS

The contract monies, including any interest earned, may only be used for the purpose(s) stated in this agreement, as contained in the approved budget in **Attachment C: Project Budget** and detailed in **Attachment B: Scope of Work**.

Funds may not be expended for any other purpose without the prior written approval of EcoHealth Alliance. Should there be a material change in the purpose, character, or method of operation of the agreement, the University of North Carolina at Chapel Hill agrees to give prompt and detailed written notice to EcoHealth Alliance. The contract project shall be performed to EcoHealth Alliance's satisfaction as determined by EcoHealth Alliance.

Where appropriate, the University of North Carolina at Chapel Hill agrees to conform to accepted animal care and use practices as laid out in the latest IACUC, if applicable, approved by EcoHealth Alliance, and filed with the appropriate regulatory authorities. The University of North Carolina at Chapel Hill also agrees to follow all requirements regarding scientific conduct.

IV. NATURE OF RELATIONSHIP

The parties hereto intend by this agreement solely to specify the terms for the University of North Carolina at Chapel Hill's use of EcoHealth Alliance contract funds. Nothing in this agreement shall be construed as creating or constituting the relationship of employer and employee between EcoHealth Alliance and the University of North Carolina at Chapel Hill or the continuation of funding from EcoHealth Alliance. During the course of completing the contract project work, the University of North Carolina at Chapel Hill remains a distinct and separate legal entity from that of EcoHealth Alliance.

The University of North Carolina at Chapel Hill agrees to conform to the laws and regulations of the location in which they operate and obtain all required permits, agreements and insurance required by local authorities.

V. REPORTING REQUIREMENTS

The University of North Carolina at Chapel Hill agrees to fulfill the program scope of services and reporting requirements that are incorporated into this agreement and detailed in **Attachment B: Scope of Work**.

VI. PHOTOGRAPHS AND VIDEO

EcoHealth Alliance shall own and have the right to use the recorded media (photos, video, audio) notwithstanding any licenses or other rights granted to the University of North Carolina at Chapel Hill herein. The University of North Carolina at Chapel Hill shall retain the unrestricted right to use the recorded media (photos, video, audio) for publication and for educational and research purposes. EcoHealth Alliance grants to the University of North Carolina at Chapel Hill an irrevocable, royalty-free, non-transferable, non-exclusive right and license to use, reproduce, make derivative works, display, and perform publicly any material first developed and delivered under this contract.

VII. PUBLICATION REVIEW AND APPROVAL

At least thirty (30) days prior to the publication of any written work made possible by this EcoHealth Alliance contract agreement, or involving data or information gained in whole or in part from research or activity conducted under this agreement, a copy of such work must be sent to EcoHealth Alliance for pre-publication review and recommendations for revision by EcoHealth Alliance. The University of North Carolina at Chapel Hill is under no obligation to make any changes to the requested publication, except to delete Confidential Information within the EcoHealth Alliance review period. EcoHealth Alliance will respond within thirty (30) days of notification. All published work must recognize EcoHealth Alliance or as may be otherwise determined EcoHealth Alliance and required by the parent award from NIH/NIAID in the acknowledgements. Written work that is not approved by EcoHealth Alliance may not recognize EcoHealth Alliance in the acknowledgements.

The Parties may communicate to one another information of a proprietary nature that is directly related to the Scope of Work ("Confidential Information"). "Disclosing Party" means the Party providing Confidential Information to the other Party, and "Receiving Party" means the Party receiving Confidential Information. The Receiving Party shall neither use nor disclose Confidential Information except as permitted herein during the term of the agreement and for five (5) years thereafter. The Parties shall disclose only the portion of Confidential Information necessary to conduct the Study. Confidential Information shall be disclosed in writing and identified as such, or if disclosed orally, shall be reduced to writing within thirty (30) days thereafter. The definition of Confidential Information does not include information is (i) at the time of disclosure, is in the public domain, or later becomes part of the public domain; (ii) was received by the Receiving Party from a third Party; (iii) was independently developed by Receiving Party; (iv) is approved for release by the Disclosing Party; (v) was in Receiving Party's possession at the time of disclosure; or (vi) is required to be disclosed pursuant to law, regulation, or a court order.

VIII. EVALUATION OF THE AGREEMENT

At its own expense, EcoHealth Alliance may monitor and conduct an evaluation of operations under this contract agreement. Evaluation may include scheduled visits to the University of North Carolina at Chapel Hill by representatives of EcoHealth Alliance in order to observe and discuss the funded project.

IX. DISBURSEMENT OF FUNDS

Unless otherwise stated below, contract funds shall be disbursed by EcoHealth Alliance based on the following criteria:

1. The University of North Carolina at Chapel Hill shall submit a valid invoice to EcoHealth Alliance indicating the services performed, as well as the time period covered by the invoice. The University of North Carolina at Chapel Hill should attach a transaction report needed to substantiate any out-of-pocket expenses.
2. The University of North Carolina at Chapel Hill must sign the invoice as certification that the services rendered, and all expenses incurred have been pursuant to the scope of service contained in this agreement.
3. EcoHealth Alliance will invoice the funding source for the value of the invoice and remit the funds to the University of North Carolina at Chapel Hill in a timely manner.
4. EcoHealth Alliance reserves the right to delay payment of any funds due to insufficient documentation submitted by the University of North Carolina at Chapel Hill.
5. The University of North Carolina at Chapel Hill acknowledges that all invoices must be submitted to EcoHealth Alliance no more than 45-days after the end of the contract. Invoices submitted after these periods may not be invoiced to the funding source and may not be paid to the University of North Carolina at Chapel Hill.

Unless otherwise directed, EcoHealth Alliance shall remit US funds by bank wire made payable to the University of North Carolina at Chapel Hill. The legal name of the University of North Carolina at Chapel Hill, who must be the sole owner of the account, must appear on the account. The University of North Carolina at Chapel Hill shall provide the following banking information to EcoHealth Alliance:

Organization Name: University of North Carolina at Chapel Hill
Bank Name: Bank of America
Bank Address: 104 E. Main Street, Carboro, NC 27510
Account Number: [REDACTED]
ABA Code: [REDACTED]
Bank Telephone: 1-888-715-1000, Ext 21598

When a transfer is initiated EcoHealth Alliance will include "IPF 19-5722" in the message and notify:

(b) (6), Cash Manager
Office of Sponsored Research

Phone: (b) (6) Fax: 919-962-5011
Email: (b) (6)

X. SUBCONTRACTOR 'S FINANCIAL RESPONSIBILITIES

As applicable, the University of North Carolina at Chapel Hill agrees to adhere to all requirements contained in 2 CFR Part 200 – Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards during the term of the agreement. The University of North Carolina at Chapel Hill acknowledges responsibility for Federal Audit requirements for funds received under this agreement and will provide EcoHealth Alliance a copy of their most current single audit report as may be provided. The University of North Carolina at Chapel Hill agrees that all overhead charged to this grant shall not exceed the amount permitted by the federal indirect cost rate in effect during the performance period. The University of North Carolina at Chapel Hill shall provide EcoHealth Alliance with a copy of their most current federal indirect cost rate agreement. If requested, the University of North Carolina at Chapel Hill will provide EcoHealth Alliance with a copy of a most current audit report. The University of North Carolina at Chapel Hill agrees to keep systematic records of all expenditures relating to this agreement. A quarterly financial report is required along with a signed invoice for services and reimbursement of expenses. Documentation of expenses, consisting of bills, invoices, receipts, logbooks (acceptable only for gasoline for cars and boats), etc., must be retained by the University of North Carolina at Chapel Hill for three (3) years after the close of the agreement period and must be available for inspection by representatives of EcoHealth Alliance at any time during this period. EcoHealth Alliance may, at its own expense, examine, audit, or have audited the records of the University of North Carolina at Chapel Hill insofar as they relate to activities supported by this agreement. All audits, inspections, and examinations must be reasonably requested, scheduled at least seven (7) business days in advance to occur during normal business hours, and are conducted at the sole expense of EcoHealth Alliance.

The University of North Carolina at Chapel Hill budget records must be itemized in the following categories, as applicable:

1. Salary or stipend – detailed by person, rate as applicable, date, and amount
2. Purchased services (e.g., field asst., boat hire) – detailed at the level of numbers 1 & 2, above. Detailed logbooks (including dates, times, and signatures) are acceptable when signed by both University of North Carolina at Chapel Hill and EHA or responsible party.
3. Vehicle associated costs – mileage to be indicated along with any associated costs: driver, repairs, insurance, etc. Detailed logbooks (including dates, times, and signatures) are acceptable when signed by both University of North Carolina at Chapel Hill and EHA or responsible party.
4. Travel – trip cost indicating departure/arrival dates and air/car/train/boat costs along with all boarding passes and receipts.
5. Accommodation – location and amounts per person along with all lodging receipts.
6. Other – any other items that do not fall into the categories above with same level of detail.

The University of North Carolina at Chapel Hill shall submit detailed invoices to EcoHealth Alliance detailing actual expenditures compared to the approved budget or contract total. Invoices are subject to review and approval of EcoHealth Alliance's principal investigator and/or grants and programs manager who shall certify that all expenses are in conformity with the award.

EcoHealth Alliance reserves the right to request documentation of all costs incurred as part of its normal practices in the use of federal funds.

XI. PURCHASE OF CAPITAL EQUIPMENT

All capital equipment, items valued over US \$5,000 and with a useful life of three years or more, purchased with agreement money remains the property of The University of North Carolina.

XII. UNUSED FUNDS

The University of North Carolina at Chapel Hill agrees to return to EcoHealth Alliance at the conclusion of the agreement period all agreement funds that have not been used to complete the project. The University of North Carolina at Chapel Hill may not use agreement funds after the end of the agreement period without the written consent of EcoHealth Alliance unless both University of North Carolina at Chapel Hill and EcoHealth Alliance agree to an extension of this contract and both parties sign this in the form of an amendment.

XIII. REVOCATION AND REVERSION

With forty-five (45) days written notification either party may terminate the Agreement without cause and cancel all unpaid installments of the agreement. EcoHealth may require the University of North Carolina at Chapel Hill to repay all portions of the agreement that are unobligated and reasonably within the University of North Carolina at Chapel Hill's control. EcoHealth Alliance agrees to pay the University of North Carolina at Chapel Hill all reasonable and non-cancelable obligation incurred by the University of North Carolina at Chapel Hill up to the effective date of termination.

In addition, either party may terminate the Agreement for cause upon thirty (30) days written notice to the other party of an uncured breach, if the other party has breached the Agreement and has not cured such breach within the thirty (30) day period. EcoHealth may require the University of North Carolina at Chapel Hill to repay all portions of the agreement that are unobligated and reasonably within the University of North Carolina at Chapel Hill's control. EcoHealth Alliance agrees to pay the University of North Carolina at Chapel Hill all reasonable and non-cancelable obligation incurred by the University of North Carolina at Chapel Hill up to the effective date of termination.

XIV. INSURANCE AND LIABILITY

By accepting the terms and conditions of this agreement, the University of North Carolina at Chapel Hill also accepts full responsibility for any and all applicable insurance needs to the extent permitted by the North Carolina Tort Claims Act for themselves and all other University of North Carolina at Chapel Hill, project related personnel, unless a separate arrangement has been made between EcoHealth Alliance and the University of North Carolina at Chapel Hill. By signing this agreement, both the University of North Carolina at Chapel Hill and EcoHealth Alliance relieve the other party from any and all liability due to accident or injury, or any other claims that may result from any activities conducted by the University of North Carolina at Chapel Hill in relation to the contract project.

XV. ADDITIONAL SUPPORT

In making this contract agreement, EcoHealth Alliance assumes no obligation to provide other or additional support to the University of North Carolina at Chapel Hill.

XVI. NOTICE

All correspondence and project reports should include the reference log number and follow the reporting guidelines described above. Copies should be directed to:

Dr. Aleksei Chmura
EcoHealth Alliance
520 Eighth Avenue, Suite 1200
New York, NY 10018
(t) 1.212.380.4460
(e) (b) (6)

XVII. INDEMNIFICATION

The University of North Carolina at Chapel Hill and EcoHealth Alliance hereby mutually agree to indemnify and hold each other, respectively, and each other's affiliates, officers, employees, successors and assigns, harmless from and against claims, demands, actions, proceedings, investigation and right of action whether action is instituted or not and, if instituted, whether at any trial or appellate level, whether raised by the other party or a third party, arising from the intentional and/or negligent acts, errors or omissions of the University of North Carolina at Chapel Hill or EcoHealth Alliance to the extent permitted by the North Carolina Tort Claims Act.

XVIII. PARTIAL INVALIDITY

If any term or provision of this agreement to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this agreement shall not be affected thereby and shall be valid and enforceable to the fullest extent permitted by law.

XIX. Biosafety

Laboratory

- EcoHealth Alliance will review and evaluate the lab biosafety at project research sites, provide annual trainings, and conduct laboratory inspections as needed.
- All partner laboratories are required to submit applicable approval documents from their Institutional Biosafety Committees (IBC) to EcoHealth Alliance for review following signed contracts, to ensure the compliance with *NIH and CDC guidelines* (link below) or comparable. No laboratory work may be conducted without confirmed receipt by EcoHealth Alliance of these documents.
- Biosafety review and evaluation for all partner laboratories will be conducted following the *NIH and CDC Guidelines* (link below) or comparable.
- Any accident or concern related to work funded under this award must be reported to EcoHealth Alliance and your Institutional Biosafety Committee (IBC) within 72 hours and will be investigated by an independent auditor. Work will be suspended immediately until an investigation is completed to the satisfaction of EcoHealth Alliance.

NIH Guidelines: https://www.dropbox.com/s/sa0g11uyfrn139t/NIH_Guidelines%202019.pdf?dl=0

CDC Laboratory Biosafety Manual:

<https://www.dropbox.com/s/bp1g59x6bq18ehl/CDC%20Biosafety%20Guidelines.pdf?dl=0>

Field

- EcoHealth Alliance will have oversight of the field work biosafety, provide training, and enforcing biosafety regulations in the field for all work with animals.
- In-country Institutional Animal Care and use Committee (IACUC) and Institutional Review Board (IRB) approvals to work with wild animals and human subjects are required to be submitted to EcoHealth Alliance following signed contracts. No fieldwork may be conducted without confirmed receipt by EcoHealth Alliance of these approvals.
- Review and approval will be conducted globally and locally with the IACUCs and IRBs.
- Field biosafety trainings will be conducted every other year or more frequently as necessary. Online refresher trainings will be made available every year for all members of teams working with wild animals, humans, and relevant specimens.

XX. OTHER PROVISIONS

This agreement may not be transferred or assigned by either party without the prior written consent of the other, and any breach of this prohibition will deem the agreement null and void.

Each party represents and warrants that its authorized agent(s) have duly executed this agreement on its behalf.

This agreement constitutes a single integrated contract expressing the entire agreement of the parties hereto. There are no other agreements, written or oral, express or implied, between the parties hereto, concerning the subject matter hereof, except the agreements set forth in this agreement. Any amendment to this agreement is effective only if set forth in writing and signed by both parties.

(b) (6)

Dr. Peter Daszak
President
EcoHealth Alliance

01/14/2021

DATE

(b) (6)

for Terry Magnuson, PH.D.
Vice Chancellor for Research
The University of North Carolina at Chapel Hill

01/13/2021

DATE

ATTACHMENT A: FFATA

The Federal Funding Accountability and Transparency Act (FFATA) was signed on September 26, 2006 and requires information on federal awards (federal financial assistance and expenditures) be made available to the public via a single, searchable website, which is www.USASpending.gov. All contractors receiving funds from EcoHealth Alliance are required to provide the following information as a condition of receiving funds.

Please answer the following questions Yes or No.

- a. In the previous tax year, was your company's gross income from all sources above \$300,000?

Yes No

- b. In the University of North Carolina at Chapel Hill's business or organization's preceding completed fiscal year, did its business or organization (the legal entity to which the DUNS number it provided belongs) receive (1) 80 percent or more of its annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements; **and** (2) \$25,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?

Yes No

- c. Does the public have access to information about the compensation of the executives in the University of North Carolina at Chapel Hill's business or organization (the legal entity to which the DUNS number it provided belongs) through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?

Yes No

- d. Does your business or organization maintain an active registration in the System for Award Management (www.SAM.gov)?

Yes No

ATTACHMENT B: Scope of Work

Under the supervisor of Dr. Ralph Baric, Co-Investigator, coordinated by Dr. Timothy Sheahan, Research Scientist and Lab Coordinator, working close with a lab technician (TBN) the laboratory work will be implemented at the University of North Carolina at Chapel Hill to conduct systematic studies on the epidemiology, genetic evolution, interspecies infection mechanism and pathogenesis of a series of bat-borne CoVs, including:

- ***In vitro* Infection Experiment.** In vitro infection experiments using pseudoviruses carrying the spike proteins (wild type or mutants) or live viruses in cell lines of different origins, binding affinity assays between the spike proteins (wild type or mutants) and different cellular receptor molecules, and humanized mouse experiments.
- **Developing Luciferase Immunoprecipitation System (LIPS) Assay.** Develop LIPS assay for bat CoV antibody detection.
- **The Enzyme-Linked Immunosorbent Assay (ELISA) Testing.** Serological testing of bat serum samples with ELISA plates.
- **Meetings and travels.** Dr. Baric and lab team members will meet with other Co-PIs from EcoHealth Alliance and partners to refine study protocols, report results, and prepare publications

Coronaviruses (e.g. SARS-CoV, MERS-CoV), henipaviruses (HeV, NiV) and filoviruses (EBOV, MARV) are highly pathogenic viruses which emerged from zoonotic reservoirs to cause significant human morbidity and mortality. Like most emerging zoonoses, these pathogens originate in wildlife reservoirs, sometimes spilling over first into livestock ‘amplifier’ hosts, or directly into localized human populations with high levels of animal contact. Efforts to prevent emerging zoonoses have targeted these high-risk populations in regions prone to disease emergence, coupled with rapid surveillance systems designed to rapidly identify newly emerged virus pathogens in human outbreak settings. However, surveillance and control is hampered by inadequate information on the basic disease ecology, the availability of human cohorts at the interface between wildlife and human habitats, and cohorts of individuals in high-risk sites for secondary disease amplification and spread to sites around the world.

Dr. Baric will lead the studies at the University of North Carolina at Chapel Hill. He will design research strategies, interpret findings and review research outcomes with another investigator and (b) (6). At a regular basis, Dr. Baric will report the results of the team’s research to Dr. Daszak, and together, they will use this information to identify additional research priorities and design downstream studies. Drs. Daszak and Baric have published together in the past and participated on research project applications. He will work closely with another investigator and (b) (6) and (b) (6) to prepare timely reports, share research and discuss future research directions with the group.

ATTACHMENT C: PROJECT BUDGET

| YEAR 1 | | |
|---------------------------------|-----------------|---------------------------------|
| SALARY | | 17 JUN 2020 – 31 MAY 2021 |
| Ralph Baric | Co-Investigator | \$ 7,692.00 |
| TBD | Co-Investigator | \$ 30,847.00 |
| (b) (6) | Research Asst. | \$ 16,715.00 |
| (b) (6) | Lab Tech | \$ 14,935.00 |
| TOTAL SALARY | | \$ 70,189.00 |
| FRINGE | 30.95% | \$ 21,726.00 |
| TOTAL SALARY + FRINGE | | \$ 91,915.00 |
| TRAVEL | | |
| Domestic | | \$ 1,000.00 |
| International | | \$ - |
| TOTAL TRAVEL | | \$ 1,000.00 |
| OTHER DIRECT COSTS | | |
| Materials & Supplies | | \$ 30,585.00 |
| Publication Costs | | \$ 500.00 |
| Animal Housing | | \$ 1,000.00 |
| TOTAL OTHER DIRECT COSTS | | \$ 32,085.00 |
| TOTAL DIRECT | | \$ 125,000.00 |
| INDIRECT | 55.50% | \$ 69,375.00 |
| TOTAL | | \$ 194,375.00 |



EcoHealth Alliance

SCIENTIFIC RESEARCH SERVICES AGREEMENT

NAME: International Centre for Diarrhoeal Disease Research, Bangladesh (hereinafter referred to as “icddr,b”)

ADDRESS: 68 Shaheed Tajuddin Ahmed Sarani, Mohakhali, Dhaka 1212, Bangladesh.

REFERENCE LOG #: Nipah Bangladesh

PROJECT TITLE: Study of Nipah virus dynamics and genetics in its bat reservoir and of human exposure to NiV across Bangladesh to understand patterns of human outbreaks

PERIOD: 15 NOVEMBER 2020 – 30 JUNE 2021

PHONE: 880-2-9827072

FOR NOTICES AND APPROVAL: Mr. Md. Sakhawat Hossain
Contracts Manager, Regulatory & Legal Affairs
68 Shaheed Tajuddin Ahmed Sarani
Mohakhali, Dhaka 1212
Bangladesh
Email: (b) (6)

FUNDING SOURCE: 07-144-7012-52035

CFDA: 93.855

DUNS NUMBER: 731524711

AGREEMENT AMOUNT: USD **\$61,853.00**

This Scientific Research Services Agreement (the “agreement”) is by and between EcoHealth Alliance (EHA), a United States tax-exempt organization, located at 520 Eighth Avenue, New York, 10018, and International Centre for Diarrhoeal Disease Research, Bangladesh located at 68 Shaheed Tajuddin Ahmed Sarani, Mohakhali, Dhaka 1212, Bangladesh (“the researcher”).

An authorized representative of EcoHealth Alliance has executed the original version of this agreement. Please sign the digital copy and return it via email. If EcoHealth Alliance does not receive a signed copy (digital or print) within thirty (30) days of mailing, this agreement may be revoked. This agreement shall be effective only upon the receipt of the researcher's signed contract by EcoHealth Alliance.

I. TERM AND AMOUNT OF THE AGREEMENT

Subject to the continued availability of funding for this project, the term of this agreement shall be the award period stated on page 1 (the "Term"), renewable for an additional term solely by written agreement between the researcher and EcoHealth Alliance.

The funds indicated on the preceding page and detailed in **Attachment B** is to be disbursed following receipt of a signed, detailed invoice(s) indicating hours, rate(s), and date(s) worked, or locations and dates for travel and all other details as elaborated in the Financial Responsibilities section below. All deliverables and project details are elaborated in **Attachment A**.

II. CONDITIONS OF THE AGREEMENT

The laws of the United States place certain restrictions on the use of funds awarded to organizations by charitable trusts and foundations. Therefore, the researcher agrees to the following terms and conditions:

1. **Internal Revenue Code:** Funds awarded by EcoHealth Alliance may not be used for any forbidden political activities or for any purposes prohibited by the United States Internal Revenue Service Code.
2. **Foreign Corrupt Practices Act of 1977: as amended:** The researcher agrees to be bound by this act that prohibits individuals and entities from making payments to foreign government officials for the purposes of obtaining business. This includes the offer, either directly or indirectly, of anything of value, to a foreign government official to influence that official in his or her official capacity to do or omit any act in violation of their official capacity or lawful duty, or to secure any improper advantage in order to assist in obtaining or retaining business for or with, or directing business, to any person.

The researcher's directors, officers, employees and agents have not and will not offer, pay, or promise or authorize the payment, directly or indirectly through any other person or entity, of any monies or anything of value to any governmental official or employee or any political party or candidate for political office, for the purpose of inducing or rewarding any favorable action or influencing any act or decision of such official or of the government.

Funds in this agreement may not be used to finance the travel, per diem, hotel expenses, meals, conference fees or other conference costs for any member of a foreign government's delegation to an international conference sponsored by a public

international organization, except as otherwise agreed upon by EcoHealth Alliance and the researcher.

3. **Support for Acts of Terror:** The researcher certifies and represents that they will be bound by U.S. anti-terrorism legislation that prohibits having transactions with and providing material support or resources to individuals or groups that engage in or support acts of terror and that the researcher does not engage in or support, directly or indirectly, acts of terror.
4. **Financial Conflict of Interest:** The researcher certifies and represents that no Significant Financial Conflict of Interest exists regarding their participation in this project that would influence their research. They furthermore agree that if such a conflict develops during the course of this project they will promptly notify and disclose that conflict in writing to the EHA Principal Investigator and the EHA Chief Financial Officer and may be required to develop a plan of corrective action to resolve that matter. This requirement shall extend to all individuals with managerial oversight of this grant including their spouse and dependent children.
5. **Non-Discrimination Policy:** The researcher will follow a comprehensive, consistent, and non-discriminatory policy to the extent it can accomplish this goal within the scope of the program objectives.

The researcher acknowledges that EcoHealth Alliance is implementing, and over the course of this agreement will continue to implement, reasonable monitoring and oversight to assure the continuing truth of these representations and certifications.

Notwithstanding any term to the contrary, EcoHealth Alliance may terminate this agreement immediately if it determines that the researcher fails to comply with the conditions stated in this paragraph.

III. USE OF FUNDS

The award monies, including any interest earned, may only be used for the purpose(s) stated in this agreement, as contained in the approved budget in **Attachment B**, and in the scope of work defined in **Attachment A**.

Funds may not be expended for any other purpose without the prior written approval of EcoHealth Alliance. Should there be a material change in the purpose, character, or method of operation of the agreement, the researcher agrees to give prompt and detailed written notice to EcoHealth Alliance. The research project shall be performed to EcoHealth Alliance's satisfaction as determined by EcoHealth Alliance.

Where appropriate, the researcher agrees to conform to accepted care and use practices as laid out in the latest IACUC or IRB, if applicable, approved by EcoHealth Alliance, and filed with the appropriate regulatory authorities.

IV. NATURE OF RELATIONSHIP

The parties hereto intend by this agreement solely to specify the terms for the researcher's use of EcoHealth Alliance research funds. Nothing in this agreement shall be construed as creating or constituting the relationship of employer and employee between EcoHealth Alliance and the researcher or the continuation of funding from EcoHealth Alliance. During the course of completing the research project work, the researcher remains a distinct and separate legal entity from that of EcoHealth Alliance.

The researcher agrees to conform to the laws and regulations of the location in which they operate and obtain all required permits, agreements and insurance required by local authorities. They also agree to pay all fees and taxes levied on this project by applicable political authorities or designated subdivisions.

V. PHOTOGRAPHS AND VIDEO

EcoHealth Alliance retains the rights to all recorded media (photos, video, audio) recorded by the researcher as related to this project.

VI. Intellectual Property Rights

Parties agree that the proprietary rights to the data, results, inventions and other findings resulting from and specific to the work performed pursuant to this Agreement shall be owned jointly by the parties. Such joint ownership includes the right to make further use of the data, results, inventions and other findings resulting from and specific to the work performed pursuant to this Agreement with no prior notification to or approval from the other party.

VII. PUBLICATION REVIEW AND APPROVAL

At least 30 days prior to the publication of any written work – digital or print – made possible by this EcoHealth Alliance research services agreement or involving data or information gained in whole or in part from research or activity conducted under this award, a copy of such work must be sent to EcoHealth Alliance for prepublication review and recommendations for revision by EcoHealth Alliance. All work generated under this agreement must recognize EcoHealth Alliance in the acknowledgements.

VIII. EVALUATION OF THE AGREEMENT

At its own expense, EcoHealth Alliance may monitor and conduct an evaluation of operations under this research services agreement. Evaluation may include visits to the researcher by representatives of EcoHealth Alliance in order to observe and discuss the funded project.

IX. DISBURSEMENT OF FUNDS

Unless otherwise stated below, award funds shall be disbursed by EcoHealth Alliance based on the following criteria:

1. The researcher shall submit a valid invoice to EcoHealth Alliance indicating the services performed, as well as the time period covered by the invoice. The researcher should attach all supporting documentation needed to substantiate any out-of-pocket expenses.
2. The researcher must sign the invoice as certification that the services rendered and all expenses incurred have been pursuant to the scope of service contained in this agreement.
3. EcoHealth Alliance will invoice the funding source for the value of the invoice and remit the funds to the researcher in a timely manner.
4. EcoHealth Alliance reserves the right to delay payment of any funds due to insufficient documentation submitted by the researcher.
5. The researcher acknowledges that all invoices must be submitted to EcoHealth Alliance within thirty days of the end of the research. Invoices submitted after this period will not be invoiced by the funding source and will not be paid to the researcher.

Unless otherwise directed, EcoHealth Alliance shall remit US funds by bank check made payable to the researcher.

The researcher may elect to have funds wired into a bank account. The legal name of the researcher, who must be the sole owner of the account, must appear on the account.

The researcher shall provide the following banking information to EcoHealth Alliance:

Name of Bank: STANDARD CHARTERED BANK
Bank Address: SCB House (Level 4), 67 Gulshan Avenue Dhaka-1212, Bangladesh
Account Name: ICDDR,B-PROJECT
Account Number: [REDACTED]
SWIFT Code (if non-US): [REDACTED]

X. RESEARCHER'S FINANCIAL RESPONSIBILITIES

As applicable, the researcher agrees to adhere to all requirements contained in 2 CFR 200 (Uniform Administrative requirements, Cost Principles, and Audit Requirements for Federal Awards) and 2 CFR 700 (USAID Supplement to Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards) during the term of the agreement. The researcher acknowledges responsibility for 2 CFR 200 Subpart F Federal Audit requirements for funds received under this agreement and will provide EcoHealth Alliance a copy of their most current 2 CFR 200 Subpart F or similar audit report as may be provided. The researcher agrees

that all overhead charged to this grant shall not exceed the amount permitted by the federal indirect cost rate in effect during the performance period. The researcher shall provide EcoHealth Alliance with a copy of their most current federal indirect cost rate agreement.

The researcher agrees to keep systematic records of all expenditures relating to this agreement. A quarterly financial report may be required along with the required signed invoice for services in order for the researcher to be reimbursed for expenses. Documentation of expenses, consisting of bills, invoices, receipts, log books (acceptable only for gasoline for cars and boats), etc., must be submitted to EHA, as well as retained by the researcher for five (5) years after the close of the agreement period, and must be available for inspection by representatives of EcoHealth Alliance at any time during this period. EcoHealth Alliance may, at its own expense, examine, audit, or have audited the records of the researcher insofar as they relate to activities supported by this agreement.

Researcher budget and financial records must be itemized in the following categories, as applicable:

1. Salary or stipend – detailed by person, rate, date, and amount
2. Field Equipment – an original or copy (when original is not available) of all receipts or purchase orders must be provided with detailed and regular financial reports for all field equipment items.
3. Purchased services (e.g., field asst., boat hire) – detailed at the level of numbers 1 & 2, above. Detailed logbooks (including dates, times, and signatures) are acceptable when signed by both subcontractor or consultant and EHA or responsible party.
4. Vehicle associated costs – mileage to be indicated along with any associated costs: driver, repairs, insurance, etc. Detailed logbooks (including dates, times, and signatures) are acceptable when signed by both subcontractor or consultant and EHA or responsible party.
5. Travel – trip cost indicating departure/arrival dates and air/car/train/boat costs along with all boarding passes and receipts. Includes meals in transit.
6. Accommodation – location and amounts per person along with all lodging receipts.
7. Other – any other items that do not fall into the categories above with same level of detail.

The researcher shall submit detailed invoices to EcoHealth Alliance detailing actual expenditures compared to the approved budget. Invoices are subject to review and approval by EcoHealth Alliance’s Principal Investigator and/or Grants and Programs Manager, who shall certify that all expenses are in conformity with the award.

EcoHealth Alliance reserves the right to request documentation of all costs incurred as part of its normal practices in the use of federal funds.

XI. PURCHASE OF CAPITAL EQUIPMENT

All capital equipment (items valued over US \$5,000 and with a useful life of three years or more) purchased with award money remains the property of EcoHealth Alliance. The equipment shall

be returned to EcoHealth Alliance at the cost of EcoHealth Alliance at the end of the project unless EcoHealth Alliance agrees, in writing, to relinquish title to the equipment. The researcher agrees to use this equipment solely for the purposes of this project and to maintain it in proper working order.

For all such items, a completed Capital Equipment Inventory must be submitted to EcoHealth Alliance at the conclusion of the project.

XII. UNUSED FUNDS

The researcher agrees to return to EcoHealth Alliance at the conclusion of the agreement period all award funds that have not been used to complete the project. The researcher may not use award funds after the end of the agreement period without the written consent of EcoHealth Alliance unless both researcher and EcoHealth Alliance agree to an extension of this agreement and both parties sign this in the form of an amendment.

XIII. REVOCATION AND REVERSION

EcoHealth Alliance retains the right to terminate this Agreement for cause under such circumstances as the following:

1. The researcher makes material changes in the purpose, character, or method of operation of the project subject to this agreement;
2. The researcher is found to have made a material misrepresentation or misstatement in the agreement application or any required report;
3. The researcher has failed to perform any of the material terms of this agreement;
4. The researcher is found to have misappropriated funds awarded under this agreement; and
5. The researcher in the judgment of EcoHealth Alliance has misused EcoHealth Alliance's name or otherwise harmed the reputation of EcoHealth Alliance.

In the event of a termination for cause, EcoHealth Alliance may cancel all future installments under the agreement and require the researcher to repay all amounts misappropriated or otherwise related to the basis for the for cause termination.

XIV. INSURANCE AND LIABILITY

By accepting the terms and conditions of this agreement, the researcher also accepts full responsibility for any and all insurance needs, such as medical, vehicle, evacuation, etc. for themselves and all other project related personnel, unless a separate arrangement has been made between EcoHealth Alliance and the researcher. By signing this agreement, the researcher relieves EcoHealth Alliance from any and all liability due to accident or injury, or any other

claims that may result from any activities conducted by the researcher in relation to the research project.

XV. ADDITIONAL SUPPORT

In making this research agreement, EcoHealth Alliance assumes no obligation to provide other or additional support to the researcher.

XVI. NOTICE

All correspondence and project reports should include the reference log number and follow the reporting guidelines described above. Copies should be directed to:

Aleksei Chmura
EcoHealth Alliance
520 Eighth Avenue, Ste. 1200
New York, NY 10018
(t) 1.212.380.4460
(e) (b) (6)

XVII. INDEMNIFICATION

The researcher and EcoHealth Alliance hereby mutually agree to indemnify and hold each other, respectively, and each others' affiliates, officers, employees, successors and assigns, harmless from and against claims, demands, actions, proceedings, investigation and right of action, including reasonable attorneys' fees and costs, whether action is instituted or not and, if instituted, whether at any trial or appellate level, whether raised by the other party or a third party, arising from the intentional and/or negligent acts, errors or omissions of the researcher or EcoHealth Alliance.

XVIII. CHOICE OF LAW AND DISPUTE RESOLUTION

This agreement shall be governed by and construed in accordance with the laws of the State of New York.

XIX. PARTIAL INVALIDITY

If any term or provision of this agreement to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this agreement shall not be affected thereby and shall be valid and enforceable to the fullest extent permitted by law.

XX. OTHER PROVISIONS

This agreement may not be transferred or assigned by either party without the prior written consent of the other, and any breach of this prohibition will deem the agreement null and void.

Both parties agree that either party may terminate this agreement by providing 30 days advance written notice to the other party.

Each party represents and warrants that its authorized agent(s) have duly executed this agreement on its behalf.

This agreement constitutes a single integrated contract expressing the entire agreement of the parties hereto. There are no other agreements, written or oral, express or implied, between the parties hereto, concerning the subject matter hereof, except the agreements set forth in this agreement. Any amendment to this agreement is effective only if set forth in writing and signed by both parties.

(b) (6)

Dr. Peter Daszak
President, EcoHealth Alliance

12/28/2020 _____
DATE

(b) (6)

Dr. Tahmeed Ahmed
Acting Executive Director

12/27/2020 _____
DATE

ATTACHMENT A: PROJECT DELIVERABLES

Dr. Mohammed Ziaur Rahman is a co-investigator and will coordinate all laboratory activity at ICDDR,B under this project.

(b) (6) will serve as a technical advisor and will participate in project meetings and will provide input into human sampling strategies and behavioral risk assessments.

ICDDR,B will screen all bat and human samples collected under this project, according to an agreed upon sampling plan. Bat and human sera will be tested for henipavirus antibodies using the Luminex platform. Urine, fecal or oropharyngeal samples collected from bats will be tested using a real time PCR assay which targets the N gene region of NiV, and a consensus RT-PCR paramyxovirus assay which targets the nucleocapsid gene region.

Confirmatory testing will be done on a subset of serum samples using a Nipah virus IgM and IgG ELISA.

NiV-positive bat samples will be sent to NIH Rocky Mountain Laboratories for viral culture under BSL 4 conditions.

The lab will provide logistical and technical support to the Project Coordinator, (b) (6), which may include providing sample collection reagents (VTM/TriZol/etc) for field collection of samples, liquid nitrogen for cold chain, and other disposable items as per the budget and project needs. The lab will support free service from student doing academic research to strengthen in country work force capacity.

ATTACHMENT B: PROJECT BUDGET

*Amount in US\$

| <i>Particulars</i> | <i>No.</i> | <i>Months</i> | <i>Total Cost (Y1)</i> |
|--|------------|------------------------|------------------------|
| <i>Personnel</i> | | | |
| Mohammed Ziaur Rahman | 1 | 7 | 8,720 |
| (b) (6) /Consultant | 1 | 7 | 5,000 |
| Assistant Scientist – (b) (6) | 1 | 7 | 9,120 |
| (b) (6) | 1 | 7 | 2,202 |
| Lab Coordination Manager | 1 | 7 | 1,706 |
| Research Officer | 2 | 7 | 9,744 |
| Administrative Support | 1 | 1 | 3,709 |
| | | <i>Subtotal</i> | 40,201 |
| <i>Materials & Supplies</i> | | | |
| Nucleic Acid Extraction | | | 7,000 |
| NiV rt RT_PCR | | | 7,000 |
| NiV Sequencing | | | 1,050 |
| LUMINEX | | | 1,500 |
| Office and General Supplies | | | 521 |
| | | <i>Subtotal</i> | 17,071 |
| <i>Total Direct Cost</i> | | | 57,272 |
| <i>Indirect Cost</i> | | | 4,581.76 |
| <i>Total Costs</i> | | | 61,853.76 |



EcoHealth Alliance

SCIENTIFIC RESEARCH SERVICES AGREEMENT

NAME: Institute of Epidemiology Disease Control and Research (IEDCR), Bangladesh

ADDRESS: Mohakhali, Dhaka 1212, Bangladesh.

REFERENCE LOG #: Nipah Bangladesh

PROJECT TITLE: Study of Nipah virus dynamics and genetics in its bat reservoir and of human exposure to NiV across Bangladesh to understand patterns of human outbreaks

PERIOD: 15 NOVEMBER 2020 – 30 JUNE 2021

PHONE: 880 1944 333222

E-MAIL: (b) (6)

FUNDING SOURCE: 1U01AI153420

DUNS NUMBER: 731531765

AGREEMENT AMOUNT: USD \$142,216.00

This Scientific Research Services Agreement (the “agreement”) is by and between EcoHealth Alliance (EHA), a United States tax-exempt organization, located at 520 Eighth Avenue, New York, 10018, and IEDCR (“the researcher”).

An authorized representative of EcoHealth Alliance has executed the original version of this agreement. Please sign the digital copy and return it via email. If EcoHealth Alliance does not receive a signed copy (digital or print) within thirty (30) days of mailing, this agreement may be revoked. This agreement shall be effective only upon the receipt of the researcher’s signed contract by EcoHealth Alliance.

(b) (6)



I. TERM AND AMOUNT OF THE AGREEMENT

Subject to the continued availability of funding for this project, the term of this agreement shall be the award period stated on page 1 (the "Term"), renewable for an additional term solely by written agreement between the researcher and EcoHealth Alliance.

The funds indicated on the preceding page and detailed in **Attachment B** is to be disbursed following receipt of a signed, detailed invoice(s) indicating hours, rate(s), and date(s) worked, or locations and dates for travel and all other details as elaborated in the Financial Responsibilities section below. All deliverables and project details are elaborated in **Attachment A**.

II. CONDITIONS OF THE SUBAWARD AND AGREEMENT

The laws of the United States place certain restrictions on the use of funds awarded to organizations by charitable trusts and foundations. Therefore, the researcher agrees to the following terms and conditions:

1. **Internal Revenue Code:** Funds awarded by EcoHealth Alliance may not be used for any forbidden political activities or for any purposes prohibited by the United States Internal Revenue Service Code.
2. **Foreign Corrupt Practices Act of 1977: as amended:** The researcher agrees to be bound by this act that prohibits individuals and entities from making payments to foreign government officials for the purposes of obtaining business. This includes the offer, either directly or indirectly, of anything of value, to a foreign government official to influence that official in his or her official capacity to do or omit any act in violation of their official capacity or lawful duty, or to secure any improper advantage in order to assist in obtaining or retaining business for or with, or directing business, to any person.

The researcher's directors, officers, employees and agents have not and will not offer, pay, or promise or authorize the payment, directly or indirectly through any other person or entity, of any monies or anything of value to any governmental official or employee or any political party or candidate for political office, for the purpose of inducing or rewarding any favorable action or influencing any act or decision of such official or of the government.

Funds in this agreement may not be used to finance the travel, per diem, hotel expenses, meals, conference fees or other conference costs for any member of a foreign government's delegation to an international conference sponsored by a public international organization, except as otherwise agreed upon by EcoHealth Alliance and the researcher.

3. **Support for Acts of Terror:** The researcher certifies and represents that they will be bound by U.S. anti-terrorism legislation that prohibits having transactions with and providing material support or resources to individuals or groups that engage in or support

acts of terror and that the researcher does not engage in or support, directly or indirectly, acts of terror.

4. **Financial Conflict of Interest:** The researcher certifies and represents that no Significant Financial Conflict of Interest exists regarding their participation in this project that would influence their research. They furthermore agree that if such a conflict develops during the course of this project they will promptly notify and disclose that conflict in writing to the EHA Principal Investigator and the EHA Chief Financial Officer and may be required to develop a plan of corrective action to resolve that matter. This requirement shall extend to all individuals with managerial oversight of this grant including their spouse and dependent children.
5. **Non-Discrimination Policy:** The researcher will follow a comprehensive, consistent, and non-discriminatory policy to the extent it can accomplish this goal within the scope of the program objectives.

The researcher acknowledges that EcoHealth Alliance is implementing, and over the course of this agreement will continue to implement, reasonable monitoring and oversight to assure the continuing truth of these representations and certifications.

Notwithstanding any term to the contrary, EcoHealth Alliance may terminate this agreement immediately if it determines that the researcher fails to comply with the conditions stated in this paragraph.

III. USE OF FUNDS

The award monies, including any interest earned, may only be used for the purpose(s) stated in this agreement, as contained in the approved budget in **Attachment B**, and in the scope of work defined in **Attachment A**.

Funds may not be expended for any other purpose without the prior written approval of EcoHealth Alliance. Should there be a material change in the purpose, character, or method of operation of the agreement, the researcher agrees to give prompt and detailed written notice to EcoHealth Alliance. The research project shall be performed to EcoHealth Alliance's satisfaction as determined by EcoHealth Alliance.

Where appropriate, the researcher agrees to conform to accepted care and use practices as laid out in the latest IACUC or IRB, if applicable, approved by EcoHealth Alliance, and filed with the appropriate regulatory authorities. The researcher also agrees to follow all NIH requirements regarding scientific conduct.

IV. NATURE OF RELATIONSHIP

The parties hereto intend by this agreement solely to specify the terms for the researcher's use of EcoHealth Alliance research funds. Nothing in this agreement shall be construed as creating or constituting the relationship of employer and employee between EcoHealth Alliance and the

researcher or the continuation of funding from EcoHealth Alliance. During the course of completing the research project work, the researcher remains a distinct and separate legal entity from that of EcoHealth Alliance.

The researcher agrees to conform to the laws and regulations of the location in which they operate and obtain all required permits, agreements and insurance required by local authorities. They also agree to pay all fees and taxes levied on this project by applicable political authorities or designated subdivisions.

V. PHOTOGRAPHS AND VIDEO

EcoHealth Alliance retains the rights to all recorded media (photos, video, audio) recorded by the researcher as related to this project.

VI. PUBLICATION REVIEW AND APPROVAL

At least 30 days prior to the publication of any written work – digital or print – made possible by this EcoHealth Alliance research services agreement or involving data or information gained in whole or in part from research or activity conducted under this award, a copy of such work must be sent to EcoHealth Alliance for prepublication review and recommendations for revision by EcoHealth Alliance. All work generated under this agreement must recognize EcoHealth Alliance in the acknowledgements.

VII. EVALUATION OF THE AGREEMENT

At its own expense, EcoHealth Alliance may monitor and conduct an evaluation of operations under this research services agreement. Evaluation may include visits to the researcher by representatives of EcoHealth Alliance in order to observe and discuss the funded project.

VIII. DISBURSEMENT OF FUNDS

Unless otherwise stated below, award funds shall be disbursed by EcoHealth Alliance based on the following criteria:

1. The researcher shall submit a valid invoice to EcoHealth Alliance indicating the services performed, as well as the time period covered by the invoice. The researcher should attach all supporting documentation needed to substantiate any out-of-pocket expenses.
2. The researcher must sign the invoice as certification that the services rendered and all expenses incurred have been pursuant to the scope of service contained in this agreement.
3. EcoHealth Alliance will invoice the funding source for the value of the invoice and remit the funds to the researcher in a timely manner.

4. EcoHealth Alliance reserves the right to delay payment of any funds due to insufficient documentation submitted by the researcher.

5. The researcher acknowledges that all invoices must be submitted to EcoHealth Alliance within thirty days of the end of the research. Invoices submitted after this period will not be invoiced by the funding source and will not be paid to the researcher.

Unless otherwise directed, EcoHealth Alliance shall remit US funds by bank check made payable to the researcher.

The researcher may elect to have funds wired into a bank account. The legal name of the researcher, who must be the sole owner of the account, must appear on the account.

The researcher shall provide the following banking information to EcoHealth Alliance:

Name of Bank: Pubali Bank (Mohakhali Corporate Branch)
Address: 73, Mohakhali C/A, Mohakhali, Dhaka-1212, Bangladesh
Account Name: Director, IEDCR
Type of account: Current
Number: [REDACTED]
SWIFT Code (if non-US): [REDACTED]

IX. RESEARCHER'S FINANCIAL RESPONSIBILITIES

As applicable, the researcher agrees to adhere to all requirements contained in 2 CFR 200 (Uniform Administrative requirements, Cost Principles, and Audit Requirements for Federal Awards) The researcher acknowledges responsibility for 2 CFR 200 Subpart F Federal Audit requirements for funds received under this agreement and will provide EcoHealth Alliance a copy of their most current 2 CFR 200 Subpart F or similar audit report as may be provided. The researcher agrees that all overhead charged to this grant shall not exceed the amount permitted by the federal indirect cost rate in effect during the performance period. The researcher shall provide EcoHealth Alliance with a copy of their most current federal indirect cost rate agreement.

The researcher agrees to keep systematic records of all expenditures relating to this agreement. A quarterly financial report may be required along with the required signed invoice for services in order for the researcher to be reimbursed for expenses. Documentation of expenses, consisting of bills, invoices, receipts, log books (acceptable only for gasoline for cars and boats), etc., **must be submitted to EHA**, as well as retained by the researcher for five (5) years after the close of the agreement period, and must be available for inspection by representatives of EcoHealth Alliance at any time during this period. EcoHealth Alliance may, at its own expense, examine, audit, or have audited the records of the researcher insofar as they relate to activities supported by this agreement.

Researcher budget and financial records must be itemized in the following categories, as applicable:

1. Salary or stipend – detailed by person, rate, date, and amount
2. Field Equipment – an original or copy (when original is not available) of all receipts or purchase orders must be provided with detailed and regular financial reports for all field equipment items.
3. Purchased services (e.g., field asst., boat hire) – detailed at the level of numbers 1 & 2, above. Detailed logbooks (including dates, times, and signatures) are acceptable when signed by both subcontractor or consultant and EHA or responsible party.
4. Vehicle associated costs – mileage to be indicated along with any associated costs: driver, repairs, insurance, etc. Detailed logbooks (including dates, times, and signatures) are acceptable when signed by both subcontractor or consultant and EHA or responsible party.
5. Travel – trip cost indicating departure/arrival dates and air/car/train/boat costs along with all boarding passes and receipts. Includes meals in transit.
6. Accommodation – location and amounts per person along with all lodging receipts.
7. Other – any other items that do not fall into the categories above with same level of detail.

The researcher shall submit detailed invoices to EcoHealth Alliance detailing actual expenditures compared to the approved budget. Invoices are subject to review and approval by EcoHealth Alliance’s Principal Investigator and/or Grants and Programs Manager, who shall certify that all expenses are in conformity with the award.

EcoHealth Alliance reserves the right to request documentation of all costs incurred as part of its normal practices in the use of federal funds.

X. PURCHASE OF CAPITAL EQUIPMENT

All capital equipment (items valued over US \$5,000 and with a useful life of three years or more) purchased with award money remains the property of EcoHealth Alliance. The equipment shall be returned to EcoHealth Alliance at the end of the project unless EcoHealth Alliance agrees, in writing, to relinquish title to the equipment. The researcher agrees to use this equipment solely for the purposes of this project and to maintain it in proper working order.

For all such items, a completed Capital Equipment Inventory must be submitted to EcoHealth Alliance at the conclusion of the project.

XI. UNUSED FUNDS

The researcher agrees to return to EcoHealth Alliance at the conclusion of the agreement period all award funds that have not been used to complete the project. The researcher may not use award funds after the end of the agreement period without the written consent of EcoHealth Alliance unless both researcher and EcoHealth Alliance agree to an extension of this agreement and both parties sign this in the form of an amendment.

XII. REVOCATION AND REVERSION

EcoHealth Alliance retains the right to terminate this Agreement for cause under such circumstances as the following:

1. The researcher makes material changes in the purpose, character, or method of operation of the project subject to this agreement;
2. The researcher is found to have made a material misrepresentation or misstatement in the agreement application or any required report;
3. The researcher has failed to perform any of the material terms of this agreement;
4. The researcher is found to have misappropriated funds awarded under this agreement; and
5. The researcher in the judgment of EcoHealth Alliance has misused EcoHealth Alliance's name or otherwise harmed the reputation of EcoHealth Alliance.

In the event of a termination for cause, EcoHealth Alliance may cancel all future installments under the agreement and require the researcher to repay all amounts misappropriated or otherwise related to the basis for the for-cause termination.

XIII. INSURANCE AND LIABILITY

By accepting the terms and conditions of this agreement, the researcher also accepts full responsibility for any and all insurance needs, such as medical, vehicle, evacuation, etc. for themselves and all other project related personnel, unless a separate arrangement has been made between EcoHealth Alliance and the researcher. By signing this agreement, the researcher relieves EcoHealth Alliance from any and all liability due to accident or injury, or any other claims that may result from any activities conducted by the researcher in relation to the research project.

XIV. ADDITIONAL SUPPORT

In making this research agreement, EcoHealth Alliance assumes no obligation to provide other or additional support to the researcher.

XV. NOTICE

All correspondence and project reports should include the reference log number and follow the reporting guidelines described above. Copies should be directed to:

Aleksei Chmura
EcoHealth Alliance
520 Eighth Avenue, Ste. 1200
New York, NY 10018
(t) 1.212.380.4460
(e) [REDACTED] (b) (6)

[REDACTED] (b) (6)

XVI. INDEMNIFICATION

The researcher and EcoHealth Alliance hereby mutually agree to indemnify and hold each other, respectively, and each others' affiliates, officers, employees, successors and assigns, harmless from and against claims, demands, actions, proceedings, investigation and right of action, including reasonable attorneys' fees and costs, whether action is instituted or not and, if instituted, whether at any trial or appellate level, whether raised by the other party or a third party, arising from the intentional and/or negligent acts, errors or omissions of the researcher or EcoHealth Alliance.

XVII. CHOICE OF LAW

This agreement shall be governed by and construed in accordance with the laws of the State of New York.

XVIII. PARTIAL INVALIDITY

If any term or provision of this agreement to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this agreement shall not be affected thereby and shall be valid and enforceable to the fullest extent permitted by law.

XIX. OTHER PROVISIONS

This agreement may not be transferred or assigned by either party without the prior written consent of the other, and any breach of this prohibition will deem the agreement null and void.

Both parties agree that either party may terminate this agreement following confirmation of written notice to the other party.

Each party represents and warrants that its authorized agent(s) have duly executed this agreement on its behalf.

This agreement constitutes a single integrated contract expressing the entire agreement of the parties hereto. There are no other agreements, written or oral, express or implied, between the parties hereto, concerning the subject matter hereof, except the agreements set forth in this agreement. Any amendment to this agreement is effective only if set forth in writing and signed by both parties.

(b) (6)

Dr. Peter Daszak
President, EcoHealth Alliance

November 23, 2020
DATE

(b) (6)

Prof Tahmina Shirin, PhD
Director, IEDCR
Prof. Dr. Tahmina Shirin PhD
Director

Institute of Epidemiology Disease Control and Research (IEDCR)
DATE 17.11.2020
Mohakhali, Dhaka

ATTACHMENT A: PROJECT DELIVERABLES

Under this scientific research services agreement, The IEDCR will:

- Work with EHA Bangladesh program coordinator, Ariful Islam, who will coordinate and supervise project field teams: wildlife, human community and behavioral, and human testing to fulfill the specific aims of the grant.
- Ensure the adequate allocation of staff time in accordance with the below activities.
- Coordinate human data collection and analysis as described under the specific aims of the project proposal in partnership with EHA
- Coordinate Nipah outbreak investigations with EHA team, which will be responsible for animal and environmental investigations including but not limited to, the collection of bat samples (primarily roost urine samples) from bat colonies proximal to the suspected index case (within 5 km of the index case village). The IEDCR Director will communicate with EHA Bangladesh coordinator to initiate outbreak investigation activities and the EHA coordinator will communicate activities and findings with the IEDCR director in a mutually agreed upon manner.
- Share outbreak case data, virus detection data including viral genomic sequences and aliquots of PCR positive clinical samples to be sent to NIH Rocky Mountain Labs for the purpose of NiV culture under BSL 4 conditions.
- Work with the EHA program coordinator to obtain local IRB and IACUC approval of the research protocols
- Provide access to IEDCR vehicles for project-related activities
- Coordinate and work with EHA Nipah Bangladesh team to collect biological specimens from bats according to the IACUC protocol
- Collect blood from human study subjects for serological testing and facilitate transfer to IEDCR in liquid nitrogen dry shippers. Perform IgM ELISA screening of serum samples and facilitate testing at ICDDRB of human sera for henipavirus and filovirus antibodies using the Luminex platform
- Maintain and ensure compliance with global and local IRB protocols required for human testing and analysis of human data. Maintain any necessary local permits to work with human or wildlife samples.
- Ensure all animal data, human data and questionnaire data, and specimen data into the EHA Nipah virus database within two weeks of sampling, giving the questionnaire or the completion of testing, with close communication with EHA Bangladesh coordinator and EHA global team
- Coordinate and work with EHA Bangladesh program coordinator and EHA global team to ensure that all staff working on the project complete all necessary training on protocols and lab and field safety procedures and receive all requisite vaccinations (rabies, tetanus) before handling animals, working with humans (hepatitis B) or collecting or handling samples; maintain an up-to-date staff roster of all individuals involved in the project
- Ensure that all staff working on the Nipah virus ecology project complete training on bat sampling, maintain human subject certification (CITI) if relevant, and lab safety procedures and receive rabies and tetanus vaccinations before handling bats or other animals, hepatitis

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B vaccinations before working with human blood samples. Ensure that staff using N95 masks are fit tested according the protocols and EHA guidelines

- Store all samples (animals and humans) in a -80°C freezer or liquid nitrogen dewar. Make every reasonable effort to ensure cold chain and sample quality from the field to the lab
- Prepare samples for shipment to partner laboratories, acquire necessary permits and ensure quality control and safety when handling samples
- IEDCR will send all PCR-positive human clinical samples to NIH Rocky Mountain laboratories for genome sequencing
- Establish data sharing and communication process with state and federal partner agencies as appropriate to strengthen data platforms and improve the ease of dissemination of relevant animal, human, epidemiological, and ecological data
- Participate, as appropriate, in analyses of data and preparation of publications related to this work, including reports to NIH and scientific manuscripts
- IEDCR will participate in the development and delivery of questionnaires to study subjects to obtain information of history of Nipah virus infection and exposure. All patient information will be stored securely at IEDCR
- Participate on calls and meeting with the EcoHealth Alliance's Bangladesh programs coordinator and EHA global team as requested; hold regular team calls as agreed.
- Maintain responsibility for the safety, well-being and performance of any staff hired while in the field or laboratory; and report any issues to the EHA Bangladesh Programs Coordinator and project PI and EHA global team
- Ensure regular COVID-19 testing for the field team before and after field, quarantine and treatment facility and guidance if some one infected with COVID-19
- Prepare monthly financial reports, (including requests for additional documentation and clarification in coordination and consultation with EHA Bangladesh coordinator by requested deadlines

ATTACHMENT B: PROJECT BUDGET

*Amount in US\$

| <i>Particulars</i> | <i>No.</i> | <i>Months</i> | <i>Total Cost (Y1)</i> |
|--|------------|-----------------|------------------------|
| Personnel | | | |
| Program Associate (Finance) | 1 | 7 | 5,000 |
| Office Assistant – (b) (6) | 1 | 7 | 2,333 |
| Research Officer – (b) (6) | 1 | 8 | 10,476.2 |
| Research Officer – (b) (6) | 1 | 3 | 3,928.6 |
| Medical Microbiologist – (b) (6) | 1 | 8 | 11,904.8 |
| Medical Technologist – (b) (6) | 1 | 7 | 3,166.7 |
| Veterinary Research Officer – (b) (6) | 1 | 8 | 10,476.2 |
| Field Veterinarian – (b) (6) | 1 | 8 | 9,047.6 |
| Field Coordinator – (b) (6) | 1 | 7 | 10,416.7 |
| Senior Field Research Asst – (b) (6) | 1 | 8 | 5,238.1 |
| Senior Technician – (b) (6) | 1 | 7 | 3,750 |
| Senior Technician – | 1 | 7 | 3,750 |
| Senior Technician – | 1 | 7 | 3,166.7 |
| Technician | 3 | 5 | 5,000 |
| | | Subtotal | 87,654.57 |
| Equipment | | | |
| (-80°C) Freezer | 1 | | |
| | | Subtotal | ~10-15,000 |
| Travel | | | |
| Car Rental | | 7 | 5,416.67 |
| Car Fuel & Other Cost | | 7 | 2,333.33 |
| Food & Accomodation | | 7 | 12,000 |
| | | Subtotal | 19,750 |
| Materials & Supplies | | | |
| Field Supplies for human & animal sampling | | 3 | 15,000 |
| Human Outbreak Sample Testing PCR | | 1 | 4,000 |
| Compter/ IT support for animal & human team | | 1 | 1,500 |
| IRB fee for human & animal protocol | | 2 | 900 |
| Government partners meeting | | 1 | 1,000 |
| Health Insurance, rabies vaccine for animal team | | 1 | 3,000 |
| | | Subtotal | 25,400 |
| Total Direct Cost | | | 132,804.57 |
| Indirect Cost | | | 9,296.32 |
| Total Costs | | | 142,101 |

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Prof. Dr. Tahmina Shirin PhD
Director

Institute of Epidemiology Disease Control and Research (IEDCR)
Mohakhali, Dhaka



EcoHealth Alliance

SUBCONTRACTOR POLICY STATEMENT

EcoHealth Alliance is responsible to ensure that its subcontractors meet the terms, conditions, and regulations of its federal or other funding agencies. As primary recipient of funds and in addition to its own policies, EcoHealth Alliance undertakes stewardship activities and complies with all federal and state laws and funding agency requirements. When assigning responsibility for conducting work to a subrecipient, EcoHealth Alliance remains responsible to the funder for the management of funds and meeting project performance goals. This responsibility includes reporting as required by the Federal Funding Accountability and Transparency Act Subaward Reporting System. Monitoring of subrecipient technical and financial activities is an integral part of EcoHealth Alliance's stewardship.

Use of Funds

- All subrecipient contract funds including any interest earned may only be used for the purpose stated in each signed subrecipient agreement and their respective, approved budgets and scopes of work.
- Should there be a material change in the purpose, character, or method of operation of the agreement, subrecipients must give prompt notice to EcoHealth Alliance. No changes may be conducted or reimbursed without EcoHealth Alliance's written approval in the form of a contract amendment approved and signed by both EcoHealth Alliance and the subrecipient. Indirect cost and other applicable rates must be in accordance with funder and EcoHealth Alliance policies per respective subrecipient.
- The scope of work performed by subrecipients shall be performed to EcoHealth Alliance's satisfaction.
- All subrecipient contracts require subrecipients to agree to conform to approved IACUC, IRB, and other protocols including relevant reporting per the scope of work, the funding agency, and EcoHealth Alliance.
- Subrecipient contracts contain relevant requirements regarding scientific conduct and conflict of interest.

Reporting Requirements

EcoHealth Alliance will invoice the funding source for the value of its approved subrecipient invoices and remit the funds to subrecipients in a timely manner based on the following criteria that subrecipients must:

- Submit approved invoices to EcoHealth Alliance indicating the services performed, the time covered by the invoice, and all other contractual stipulations.
- Provide supporting documentation to substantiate all invoiced expenses.
- Sign invoices to certify that services rendered, and all expenses incurred have been within the scope of service contained in their respective agreements.
- Submit all invoices and supporting documentation to EcoHealth Alliance no more than 45-days after the end of the contract. Invoices submitted after these periods may not be invoiced to the funding source and may not be paid to the Subrecipient.

EcoHealth Alliance has the right to request documentation of all costs incurred by subrecipients as part of their normal practice in performance of the contractual scope of work and use of the contracted funds. All EcoHealth Alliance subrecipient agreements include language stating that EcoHealth Alliance reserves the right to delay or halt payment of any funds due to insufficient financial or other reporting documentation provided by a subrecipient. These criteria and conditions in this policy are included and further detailed in the language of all

EcoHealth Alliance subrecipient agreements. Following funder requirements and at EcoHealth Alliance's discretion, this policy may be subject to change.



30 April 2022

Michelle G. Bulls
Director, Office of Policy for Extramural Research Administration
Office of Extramural Research

Dear Michelle Bulls,

In response to the bulleted items and requests in your letter dated 06 April 2022, we note the following:

1. As per item 9 in our CAP, we have attached our policy on Subrecipient financial reporting: "**01 EcoHealth Alliance Subrecipient Financial Reporting Policy.pdf**"
2. All seven active subawards under NIH awards U01AI151797 and U01AI153420 to EcoHealth Alliance are included in a single document "**02 EHA Subawards.pdf**". Each contains the correct, approved NIH F&A rate of 8% for foreign subrecipients. Since the 8% rate has correctly been applied on all these subawards from the beginning of each U01AI151797 and U01AI153420 only the language to be added under the CAP has been incorporated as respective amendments in the attached "**03 EHA Subawards Amendments.pdf**". Signed amendments have been reviewed, approved, and signed by Institute of Epidemiology Disease Control and Research, Henry Jackson Foundation / Uniformed Services University, University of North Carolina, International Centre for Diarrhoeal Disease Research Bangladesh, Chulalongkorn University, and Conservation Medicine Ltd. Due to national holidays and pandemic delays, institutional signature is still pending at Duke–National University of Singapore and an executed Amendment will be forwarded to you as soon as it is received by our team.
3. Federal Funding Accountability and Transparency Act Subaward Reporting System reporting for all active subawards under NIH awards U01AI151797 and U01AI153420 to EcoHealth Alliance is included in a single document "**04 EHA FSRS Reporting.pdf**".

4. The two noted and pending areas requiring proof of written policies and procedures for (a) timely submission of financial and progress reporting and (b) subaward reporting as required by FFATA are both addressed in the attached "**01 EcoHealth Alliance Subrecipient Financial Reporting Policy.pdf**"

I look forward to your confirmation of receipt of these documents and your reply.

Sincerely,

(b) (6)



Dr. Peter Daszak
President, EcoHealth Alliance
520 Eighth Avenue, Suite 1200
New York, NY 10018, USA
+1.212.380.4460
www.ecohealthalliance.org



April 1, 2022

Drs. Aleksei Chmura and Peter Daszak
EcoHealth Alliance, Inc.
460 W 34th St.
Suite 1701
New York, NY 10001

Dear Drs. Chmura and Daszak:

I am writing in response to your letter dated, February 4, 2022, where EcoHealth Alliance, Inc. (EHA) provided a proposed Corrective Action Plan (CAP) to address the deficiencies that NIH identified in EHA's subaward agreements.

We have reviewed the proposed CAP and have determined that we are able to partially accept the proposed CAP. Specifically, EHA has satisfactorily addressed the following NIH requirements that we outlined in our January 6, 2022:

- Show proof of written policies and procedures for the development and issuance of subaward agreements, and a plan for revising the policies to address any deficiencies. The policy must include procedures for ensuring the appropriate F&A rate is applied to all subawards.

NIHs Response to CAP: EHA satisfactorily addressed this in item number 9 of the CAP. NIH expects to receive this information no later than April 30, 2022.

- Provide NIH with copies of updated subaward agreements for all active awards that correct the deficiencies noted above and demonstrate compliance with the NIH GPS [15.2.1 Written Agreement](#). The subaward agreements must state the correct F&A rate which, for foreign subrecipients is 8% (see NIH GPS [16.6](#)).

NIHs Response to CAP: EHA satisfactorily addressed this item in number 10 of the CAP. NIH expects to receive copies of the updated subaward agreements no later than April 30, 2022.

- Provide NIH with copies of FSRS reporting for all subawards.

NIHs Response to CAP: EHA satisfactorily addressed this item in number 11 of the CAP. NIH expects to receive copies of FSRS reporting for all subawards will be provided no later than April 30, 2022.

However, we note that EHA has not addressed NIHs request in two critical areas related to policies and procedures. Below we have outlined the areas that remain pending, and they are as follows:

- Show proof of written policies and procedures for timely submission of financial and progress reporting, and a plan for revising the policies to address any deficiencies.
- Show proof of written policies and procedures for subaward reporting as required by FFATA (see NIH GPS [8.4.1.5.5](#)), and a plan for revising the policies to address any deficiencies.

We expect to receive an update on all actions outlined in the CAP no later than April 30, 2022. Once received, NIH reserves the right to request additional information about the methodology used to assess EHA's policies and procedures, and any other supporting documentation, as appropriate.

If you have any questions about our CAP assessment, or the process for establishing and monitoring corrective actions as outlined in the NIH Grants Policy Statement [8.5.1](#), please contact Kristin Ta, copied in this response.

Sincerely,

Michelle G. Bulls -S

Digitally signed by Michelle G.
Bulls -S
Date: 2022.04.01 10:01:31 -04'00'

Michelle G. Bulls

Director, Office of Policy for Extramural Research Administration

Office of Extramural Research

Email: (b) (6)



04 February 2022

Dr. Michael S. Lauer
NIH Deputy Director for Extramural Research

Dear Dr. Lauer:

I am writing in response to your letter dated 06 January 2022 regarding two awards to EcoHealth Alliance U01AI151797 and U01AI153420. These awards concern research that is critical to building US defenses against emerging diseases so as to protect US citizens, and others around the world against future pandemics. Both proposals received high scores during independent review at NIH, and both were considered a high priority for funding by NIH. The research under these contracts has led to important findings that have already been made public and are being used by the US government to bolster pandemic preparedness plans. At no point since these contracts were awarded has NIAID program staff questioned the work being undertaken, nor our compliance with the rigorous oversight that these contracts involve. We are therefore concerned that, in what appears to be in direct response to partisan political pressure, the NIH Office of the Director has generated a series of unusual, additional compliance actions on EcoHealth Alliance's scientific research.

Like other actions from your office with respect to EcoHealth Alliance, these have been taken without the involvement of program staff, which is not normal for NIH grants and contracts. We have also been informed that our program officer for R01AI110964 will no longer be able to respond to emails regarding that suspended award. For U01AI151797, we received the attached Notice of Award on 6/17/2020, which was then revised on 8/28/2020 (also attached) to include three additional requirements that are not part of the normal procedure of contract management and are not covered anywhere in NIH guidelines. We discussed this with NIAID program staff who indicated that these additions came from the Office of the Director and that they were unable to discuss them, again indicating that normal procedures have been circumvented. In 2021, we discussed the additional requirements with other awardees on the CREID network, which our U01 is part of, and heard of no other award that has been subjected to this additional burdensome oversight.

Despite our concerns, we have responded to your inquiries in good faith and will comply fully with these additional requirements. In your letter you stated that "EcoHealth Alliance has demonstrated a history of failure to comply with several elements of the terms and conditions of grant awards." To the contrary, EcoHealth Alliance has a long history of rapid compliance with all reasonable NIH requests including the many additional requests we have received over the past two years. Our program officers can attest to our maintenance of high-quality, regular communications, proactivity, and eagerness to

EcoHealth Alliance
520 Eighth Avenue, Suite 1200
New York, NY 10018
212.380.4460
EcoHealthAlliance.org

address rapidly and transparently any and all constructive criticisms. Indeed, should any of the additional requirements in your letter have been brought up to us by NIH/NIAID program staff over the last 18 months, we would have rapidly incorporated them.

Accordingly, we have reviewed the table of requirements in your 06 January 2022 letter. We have carefully gone through our records and believe that we are already in broad compliance with the requirements of NIH subrecipient administration. We have indicated this in our response to each of the 8 items you raised, and we welcome this opportunity to clarify our stance. We also acknowledge your instructions, and have indicated additional language that we will add to our subcontract agreements for each of the points you've raised and have attached a proposed CAP, with a timeline for these new additional requirements to be implemented. We also want to assure you that EcoHealth Alliance remains committed to timely compliance with all requirements for our existing and future NIH awards. In that vein, we have read the revised NoA that we received this week (2/2/22) for both U01s and will submit semi-annual reports by the 15th as requested, despite the short turnaround time and the fact that our CAP has not yet been finalized.

ITEM 1: All requirements imposed by the pass-through entity on the subrecipient so that the Federal award is used in accordance with Federal statutes, regulations and the terms and conditions of the Federal award. ("The terms and conditions of Federal-awards (including [45 CFR 75]) flow down to subawards to subrecipients" 45 CFR 75.101(b)).

STATUS (NIH): Non-compliant: Not provided.

RESPONSE (EHA): We believe our actions were compliant with NIH regulations in that our contracts specifically state that subrecipients must *adhere to all requirements contained in 2 CFR 200 (Uniform Administrative requirements, Cost Principles, and Audit Requirements for Federal Awards)*. Our understanding is that 2 CFR 200 is the "Authority" for Title 45 CFR 75 and therefore the former is inclusive of the latter. We had already provided this information to NIH: As per our revised NoA for U01AI151797 and as requested by NIH, we provided our Program Officer and Grants Management Specialist with copies of all contracts within 30 days of them being signed. Additionally, following the request from Dr. Lauer (NIH) for subrecipient (Chulalongkorn, Duke-NUS, UNC, icddr,b, and IEDCR) "subaward agreements, subawardee audit reports, subawardee safety monitoring documents, subawardee progress reports, and subawardee financial and accounting records" on 23 July 2021, we provided all documents by the 27 August 2021 deadline as requested.

CAP: We will add the following language to all contracts: "As applicable, the subrecipient agrees to adhere to all requirements contained in 2 CFR 200 (Uniform Administrative requirements, Cost Principles, and Audit Requirements for Federal Awards) and 45 CFR 75 (Uniform Administrative Requirements, Cost Principles, and Audit Requirements for HHS Awards). The subrecipient acknowledges responsibility for CFR requirements for funds received under this agreement."

ITEM 2: Any additional requirements that the pass-through entity imposes on the subrecipient in order for the pass-through entity to meet its own responsibility to the HHS awarding agency including identification of any required financial and performance reports.

STATUS (NIH): Non-compliant: The agreements lacked clear requirements for when financial and performance reports are due, and what must be included in them. In addition, the recipient failed to submit the reports, when requested.

RESPONSE (EHA): We believe that our actions were compliant with NIH regulations, with respect to both the substance and timeliness of reports. As shown on page 12 of our contract with Chulalongkorn University and page 6 of the contract with iccdr,b (attached), our contracts clearly state that subrecipients must provide programmatic and financial reporting annually, invoice and provide financial reports quarterly, and provide all other reports as requested by NIAID and EcoHealth Alliance. In addition, we are in regular, frequent contact with subrecipients (weekly, 2-weekly, monthly conference calls and in-person meetings) during which we request program updates and verbal progress reports. Finally, during normal course of business, EHA often requests written updates. Our subrecipients invariably comply with each and all requests.

Regarding EcoHealth Alliance submitting reports to NIH when requested: As per our revised NoA for U01AI151797 and as requested by NIH, we provided our Program Officer and Grants Management Specialist with copies of all contracts within 30 days of them being signed. Additionally, following the request from Dr. Lauer (NIH) for subrecipient (Chulalongkorn, Duke-NUS, UNC, iccdr,b, and IEDCR) "subaward agreements, subawardee audit reports, subawardee safety monitoring documents, subawardee progress reports, and subawardee financial and accounting records" on 23 July 2021, we provided all documents by the 27 August 2021 deadline as requested.

CAP: EcoHealth Alliance will expand the details of financial and performance reporting requirements, and make them uniform across each subrecipient contract.

ITEM 3: A requirement that the subrecipient permit EcoHealth and auditors to have access to the subrecipient's records and financial statements as necessary for EcoHealth to meet the requirements under 45 CFR part 75.

STATUS (NIH): Non-compliant: Not provided.

RESPONSE (EHA): We believe that our actions were compliant with NIH regulations. We did include language on subrecipient audit requirements in our contracts and did provide this information in a timely way to NIH. As shown on page 5 Section X of our contract with Chulalongkorn University, our contracts require that subrecipients agree that "EcoHealth Alliance may, at its own expense, examine, audit, or have audited the records of Chulalongkorn University insofar as they relate to activities supported by this agreement." Thus, by signing the contract, each subrecipient *de facto* agrees to permit access to their records and financial statements. As per our NoA for U01AI151797, we provided our Program Officer and Grants Management Specialist with copies of all contracts within 30-days of signing. Additionally, requests for subrecipient (Chulalongkorn, Duke-NUS, UNC, iccdr,b, and IEDCR) "subaward agreements, subawardee audit reports, subawardee safety monitoring documents, subawardee progress reports, and subawardee financial and accounting records" were requested by Dr. Lauer (NIH) and provided on 27 August 2021.

CAP: Language will be added to our contracts as follows: "The subrecipient agrees to permit EcoHealth Alliance to have access to its records and financial statements as necessary for EcoHealth Alliance to meet the requirements under 45 CFR part 75."

ITEM 4: Procedures for directing and monitoring the research effort.

STATUS (NIH): Non-compliant: Not provided.

RESPONSE (EHA): We did have adequate procedures in place for directing and monitoring the research efforts of subrecipients. In compliance with NIH Grants Policy Statement, all EcoHealth Alliance contracts with subrecipients state: “The researcher acknowledges that EcoHealth Alliance is implementing, and over the course of this agreement will continue to implement, reasonable monitoring and oversight to assure the continuing truth of these representations and certifications.” As per our NoA for U01AI151797, we provided our Program Officer and Grants Management Specialist with copies of all contracts within 30-days of signing. Additionally, requests for subrecipient (Chulalongkorn, Duke-NUS, UNC, icddr,b, and IEDCR) “subaward agreements, subawardee audit reports, subawardee safety monitoring documents, subawardee progress reports, and subawardee financial and accounting records” were requested by Dr. Lauer (NIH) and provided on 27 August 2021.

CAP: Additional detail of the procedures we normally undertake for directing and monitoring the research effort will be added to our contracts.

ITEM 5: If the subrecipient's Investigators must comply with the subrecipient's Financial Conflict of Interest policy, the subrecipient shall certify as part of the written agreement that its policy complies with the 2011 revised FCOI regulation (42 CFR 50 Subpart F). If the subrecipient cannot provide such certification, the agreement shall state that the subrecipient’s Investigators are subject to the Financial Conflict of Interest policy of the awardee Institution for disclosing Significant Financial Interests that are directly related to the subrecipient's work for the awardee Institution.

STATUS (NIH): Non-compliant: Subrecipient FCOI policy not provided, nor was there a certification as part of the written agreement demonstrating compliance with the 2011 revised FCOI regulation (42 CFR 50 Subpart F).

RESPONSE (EHA): We did provide the requisite information on FCOI to NIH in a timely way in compliance with this requirement. Subrecipient *subaward agreements, subawardee audit reports, subawardee safety monitoring documents, subawardee progress reports, and subawardee financial and accounting records* were provided to NIH on 27 August 2021. These contained documentation of EcoHealth Alliance’s certification of subrecipients' FCOI policies. All subrecipient contracts contain the following language: “Financial Conflict of Interest: The researcher certifies and represents that no Significant Financial Conflict of Interest exists regarding their participation in this project that would influence their research. They furthermore agree that if such a conflict develops during the course of this project they will promptly notify and disclose that conflict in writing to the EHA Principal Investigator and the EHA Chief Financial Officer and may be required to develop a plan of corrective action to resolve that matter. This requirement shall extend to all individuals.”

CAP: As noted, it seems from the above that we are already in compliance with this requirement. However, to remove any doubt, the CAP will indicate that we will add the following language to our contracts: "The subrecipient shall either 1) certify as part of the written agreement that its policy complies with the 2011 revised FCOI regulation (42 CFR 50 Subpart F); or 2) if the subrecipient cannot provide such certification, the agreement shall state that the subrecipient’s Investigators are subject to the Financial Conflict of Interest policy of the awardee Institution for disclosing Significant Financial Interests that are directly related to the subrecipient's work for the awardee Institution."

ITEM 6: A provision addressing ownership and disposition of data produced under the consortium agreement. This includes whether cell lines, samples or other resources will be freely available to other investigators in the scientific community or will be provided to particular investigators only.

STATUS (NIH): Non-compliant: Not provided.

RESPONSE (EHA): This conclusion is premature. Our data sharing and management plans were carefully reviewed and approved by peer-reviewers and NIH program and grants management staff prior to our awards being made. Our EID-SEARCH award is part of the NIAID CREID network, for which agreements are still being finalized among the centers on data-sharing and management. Once they are in final form, we will of course provide the policies to NIH and comply with them in our research. We are in compliance with and in regular communication with our NIAID program officers and the CREID coordinating center.

CAP: The data-sharing and management details already agreed upon in the award will be added to our contracts with subrecipients.

ITEM 7: A provision making the NIH data sharing and inventions and patent policy, including a requirement to report inventions to the recipient (see Administrative Requirements-Availability of Research Results: Publications, Intellectual Property Rights, and Sharing Research Resources), applicable to each consortium participant and its employees in order to ensure that the rights of the parties to the consortium agreement are protected and that the recipient can fulfill its responsibilities to NIH.

STATUS (NIH): Non-compliant: Not provided.

RESPONSE (EHA): We did not include these provisions in our contracts for the simple reasons that the production of inventions or patents is not a specific aim of our work with subrecipients, nor do we expect the work to produce inventions or patents.

CAP: Contracts will now include the indicated language on inventions and patents.

ITEM 8: Incorporation of applicable public policy requirements and provisions indicating the intent of each consortium participant to comply, including submission of applicable assurances and certifications (see Public Policy Requirements, Objectives, and Other Appropriation Mandates).

STATUS (NIH): Non-compliant: The agreement does not incorporate applicable public policy requirements.

RESPONSE (EHA): All of our contracts with subrecipients already include a statement that subrecipients are required to adhere to all Federal regulations pertaining to NIH subcontracts. This is indicated on page 5 of the contract with icddr,b: "As applicable, the researcher agrees to adhere to all requirements contained in 2 CFR 200 (Uniform Administrative requirements, Cost Principles, and Audit Requirements for Federal Awards) and 2 CFR 700" and on page 5 of the contract with Chulalongkorn University: "As applicable, Chulalongkorn University agrees to adhere to all requirements contained in OMB Circular A-122 during the term of the agreement." Our assumption was that this language covered adherence to the applicable public policy requirements.

CAP: To leave no doubt on this question, we will add additional language to all subcontracts as follows: “As applicable, the subrecipient will adhere to all NIH Grants Policy Statement Public Policy Requirements and Objectives (https://grants.nih.gov/grants/policy/nihgps/HTML5/section_4/4.1_public_policy_requirements_and_objectives.htm), including submission of applicable assurances and certifications (see Public Policy Requirements, Objectives, and Other Appropriation Mandates).”

In summary, our proposed CAP will include the details above and we will also address the following requests in your letter:

- Show proof of written policies and procedures for the development and issuance of subaward agreements, and a plan for revising the policies to address any deficiencies. The policy must include procedures for ensuring the appropriate F & A rate is applied to all subawards.
- Provide NIH with copies of updated subaward agreements for all active awards that correct the deficiencies noted above and demonstrate compliance with the NIH GPS 15.2.1 Written Agreement. The subaward agreements must state the correct F&A rate which, for foreign subrecipients is 8% (see NIH GPS 16.6).
- Show proof of written policies and procedures for timely submission of financial and progress reporting, and a plan for revising the policies to address any deficiencies.
- Show proof of written policies and procedures for subaward reporting as required by FFATA (see NIH GPS 8.4.1.5.5), and a plan for revising the policies to address any deficiencies.
- Provide NIH with copies of FSRS reporting for all subawards.

I hope that our responses to your concerns have clarified areas where there may have been some misunderstanding. Please don't hesitate to contact me for further discussion of any of these points, including the provisions in our proposed CAP.

I look forward to your confirmation of our CAP, so we may proceed with the amendments rapidly, and so that we can get back to the critical research in the national interest focused on predicting and preventing pandemics that these contracts involve.

Sincerely,

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Peter Daszak, PhD
President, EcoHealth Alliance
520 Eighth Avenue, Suite 1200
New York, NY 10018, USA
+1.212.380.4460
www.ecohealthalliance.org

Dr. Peter Daszak
President

(t) +1 (b) (6) ; (e) (b) (6)

EcoHealth Alliance: Proposed Corrective Action Plan

4 February 2022

Excluding any COVID-19 related delays, and by 30 April 2022 if possible, EcoHealth Alliance will have completed the following items and provided documentation to NIH as appropriate.

1. The following language will be added to all contracts: *As applicable, the subrecipient agrees to adhere to all requirements contained in 2 CFR 200 (Uniform Administrative requirements, Cost Principles, and Audit Requirements for Federal Awards) and 45 CFR 75 (Uniform Administrative Requirements, Cost Principles, and Audit Requirements for HHS Awards). The subrecipient acknowledges responsibility for CFR requirements for funds received under this agreement.*
2. EcoHealth Alliance will expand the details of financial and performance reporting requirements, and make them uniform across each subrecipient contract.
3. Language will be added to our contracts as follows: *The subrecipient agrees to permit EcoHealth Alliance to have access to its records and financial statements as necessary for EcoHealth Alliance to meet the requirements under 45 CFR part 75.*
4. Details on EcoHealth Alliance's procedures for directing and monitoring research efforts will be added to contracts.
5. The following language will be added to our subrecipient contracts: *The subrecipient shall either 1) certify as part of the written agreement that its policy complies with the 2011 revised FCOI regulation (42 CFR 50 Subpart F); or 2) if the subrecipient cannot provide such certification, the agreement shall state that the subrecipient's Investigators are subject to the Financial Conflict of Interest policy of the awardee Institution for disclosing Significant Financial Interests that are directly related to the subrecipient's work for the awardee Institution.*
6. The data-sharing and management details already agreed upon in the award will be added to our contracts with subrecipients.
7. Contracts will include indicated language on inventions and patents.
8. Additional language will be added to all subcontracts as follows: *As applicable, the subrecipient will adhere to all NIH Grants Policy Statement Public Policy Requirements and Objectives (https://grants.nih.gov/grants/policy/nihgps/HTML5/section_4/4.1_public_policy_requirements_and_objectives.htm), including submission of applicable assurances and certifications (see Public Policy Requirements, Objectives, and Other Appropriation Mandates).*
9. Policies will be provided to NIH for the development and issuance of EcoHealth Alliance subaward agreements including a plan for revisions to address deficiencies and ensuring subawards include the appropriate F & A rate and subaward reporting as required by FFATA.
10. Updated subaward agreements for all active NIH awards will be provided to NIH and include (a) language on timely submission of financial and progress reporting.
11. Copies of FSRS reporting for all subawards will be provided to NIH.



January 6, 2022

Drs. Aleksei Chmura and Peter Daszak
EcoHealth Alliance, Inc.
460 W 34th St.
Suite 1701
New York, NY 10001

Re: U01AI151797 and U01AI153420

Dear Drs. Chmura and Daszak:

I am writing to inform you of the actions that the National Institutes of Health (NIH) is taking with respect to grants administration at EcoHealth Alliance (EcoHealth). Pursuant to 45 C.F.R. § 75.207 and the NIH Grants Policy Statement Chapter 8.5, NIH is imposing specific award conditions on EcoHealth’s active awards, U01AI151797 and U01AI153420. EcoHealth has demonstrated a history of failure to comply with several elements of the terms and conditions of grant awards not only for these active awards, but also for the suspended award, R0AI110964. Specifically, we have identified deficiencies in the timely submission of financial and Research Performance Progress Reports (RPPR), compliance with the Federal Funding Accountability and Transparency Act (FFATA) via FFATA Subaward Reporting System (FSRS), and other monitoring requirements.

NIH has reviewed the materials you provided in prior correspondence and determined that EcoHealth’s subaward agreements do not contain required components, as outlined in 45 C.F.R. § 75.352 and the [NIH GPS 15.2.1](#), and are out of compliance. Specifically:

| Written Agreement Requirements | Compliance - Status |
|---|---|
| All requirements imposed by the pass-through entity on the subrecipient so that the Federal award is used in accordance with Federal statutes, regulations and the terms and conditions of the Federal award. (“The terms and conditions of Federal-awards (including [45 CFR 75]) flow down to subawards to subrecipients” 45 CFR 75.101(b)) | Non-compliant: Not provided. |
| Any additional requirements that the pass-through entity imposes on the subrecipient in order for the pass-through entity to meet its own responsibility to the HHS awarding agency including identification of any required financial and performance reports. | Non-compliant: The agreements lacked clear requirements for when financial and performance reports are due, and what must be included in them. In addition, the recipient failed to submit the reports, when requested. |
| A requirement that the subrecipient permit EcoHealth and auditors to have access to the subrecipient's records and financial statements as necessary for EcoHealth to meet the requirements under 45 CFR part 75. | Non-compliant: Not provided. |
| Procedures for directing and monitoring the research effort. | Non-compliant: Not provided. |

| | |
|---|---|
| <p>If the subrecipient's Investigators must comply with the subrecipient's Financial Conflict of Interest policy, the subrecipient shall certify as part of the written agreement that its policy complies with the 2011 revised FCOI regulation (42 CFR 50 Subpart F). If the subrecipient cannot provide such certification, the agreement shall state that the subrecipient's Investigators are subject to the Financial Conflict of Interest policy of the awardee Institution for disclosing Significant Financial Interests that are directly related to the subrecipient's work for the awardee Institution.</p> | <p>Non-compliant: Subrecipient FCOI policy not provided, nor was there a certification as part of the written agreement demonstrating compliance with the 2011 revised FCOI regulation (42 CFR 50 Subpart F).</p> |
| <p>A provision addressing ownership and disposition of data produced under the consortium agreement. This includes whether cell lines, samples or other resources will be freely available to other investigators in the scientific community or will be provided to particular investigators only.</p> | <p>Non-compliant: Not provided.</p> |
| <p>A provision making the NIH data sharing and inventions and patent policy, including a requirement to report inventions to the recipient (see Administrative Requirements-Availability of Research Results: Publications, Intellectual Property Rights, and Sharing Research Resources), applicable to each consortium participant and its employees in order to ensure that the rights of the parties to the consortium agreement are protected and that the recipient can fulfill its responsibilities to NIH.</p> | <p>Non-compliant: Not provided.</p> |
| <p>Incorporation of applicable public policy requirements and provisions indicating the intent of each consortium participant to comply, including submission of applicable assurances and certifications (see Public Policy Requirements, Objectives, and Other Appropriation Mandates).</p> | <p>Non-compliant: The agreement does not incorporate applicable public policy requirements.</p> |

NIH further identified non-compliance within EcoHealth's subaward agreement and invoices with the Wuhan Institute of Virology on grant R01AI110964, where it showed that EcoHealth did not charge the correct Facilities and Administrative (F&A) rate of 8 percent for the cost of compliance (see [NIH GPS 16.6](#)) which is required for all foreign awards. NIH identified that an inappropriate F&A was charged at a rate of 11 percent for years 2-5 of the subaward agreement.

When NIH identifies a recipient's history of non-compliance with the general or specific terms and conditions of NIH grant awards, NIH may take proactive actions to protect the Federal government's interests and may impose additional specific award conditions as needed (see 45 CFR 75.207 and NIH [GPS 8.5](#)). Given the non-compliance in the aforementioned areas, NIH is implementing specific award conditions (SAC) on all active awards to EcoHealth (U01AI151797 and U01AI153420), as follows.

- The expanded authority for automatic no-cost extensions is withdrawn. This will require that EcoHealth request and receive written prior approval from the appropriate NIH awarding Institute or Center (IC) before any extensions of the final budget period.

- Automatic carryover authorities are withdrawn. This will require EcoHealth to request and receive written approval to carry over any unobligated balances on all awards prior carrying over unobligated balances from one budget period to any subsequent budget period.
- EcoHealth is required to submit semi-annual RPPRs and Federal Financial Reports to the awarding IC.

EcoHealth must develop and successfully implement a Corrective Action Plan (CAP) for these awards with milestones to address and correct the deficiencies noted in this letter. The Corrective Action Plan, at a minimum, must include the following:

- Show proof of written policies and procedures for the development and issuance of subaward agreements, and a plan for revising the policies to address any deficiencies. The policy must include procedures for ensuring the appropriate F & A rate is applied to all subawards.
- Provide NIH with copies of updated subaward agreements for all active awards that correct the deficiencies noted above and demonstrate compliance with the NIH GPS [15.2.1 Written Agreement](#). The subaward agreements must state the correct F&A rate which, for foreign subrecipients is 8% (see NIH GPS [16.6](#)).
- Show proof of written policies and procedures for timely submission of financial and progress reporting, and a plan for revising the policies to address any deficiencies.
- Show proof of written policies and procedures for subaward reporting as required by FFATA (see NIH GPS [8.4.1.5.5](#)), and a plan for revising the policies to address any deficiencies.
- Provide NIH with copies of FSRS reporting for all subawards.

Once NIH reviews the CAP and determines that EcoHealth has successfully implemented it and has corrected the deficiencies noted in this letter, we will remove the SACs on the active awards without additional action on the part of EcoHealth. If we determine that additional information and actions are required, we will notify EcoHealth so that we can ensure compliance and, ultimately, remove the SACs.

Please provide the CAP to me within 30 days of receipt of this letter. If you have questions or would like to request reconsideration of the specific award conditions on the active awards, please feel free to contact me via email.

Sincerely,

Lauer, Michael (NIH/OD) [E]
Digitally signed by Lauer, Michael (NIH/OD)
Date: 2022.01.06 16:25:16 -05'00'

Michael S. Lauer, M.D.
NIH Deputy Director for Extramural Research
(b) (6)



6 January 2022

Drs. Aleksei Chmura and Peter Daszak
EcoHealth Alliance, Inc.
460 W 34th St
Suite 1701
New York, NY 10001

Re: R01AI110964

Dear Drs. Chmura and Daszak:

Thank you for your correspondence of November 18, 2021. We are following up on your response to our request for Institutional Animal Care and Use Committee (IACUC) approval for the field work, and your response to our request for laboratory notebook entries and electronic files related to the experiments described in the Year 4 RPPR and Year 5 I-RPPR.

IACUC Approval

As we noted before and as required by the NIH Grants Policy Statement (GPS), [4.1.1.2](#), NIH requires verification of IACUC approval of those sections of the grant application that involve use of vertebrate animals. As noted by the NIH Office of Laboratory Animal Welfare (OLAW) cover letter accompanying your Interinstitutional Agreement for the WIV animal work, “under your approved Assurance with the Wuhan Institute of Virology, their Institutional Animal Care and Use Committee (IACUC) is authorized to carry out subsequent reviews of this project.” In the final Vertebrate Animal Section of EcoHealth’s Just-in-Time materials submitted on May 16, 2014 for 1 R01 AI110964-01, you stated that “all animal work to be done at Wuhan has been approved by the Wuhan IRB (IACUC) #WIVA05201402. Animals will be housed in a BSL-3 facility and will be under the care of a full-time veterinarian.”

In my November 5, 2021, letter I requested documentation from the *WIV IACUC* regarding approval for *field work* (e.g., work in caves to collect materials from live bats) supported by R01AI110964. In your November 18, 2021, letter you indicated that no such *WIV IACUC* documentation exists. You stated, “the fieldwork in China that we conducted under our R01 is covered by the Inter-institutional agreement we cited in our letter of October 26th, and by our relevant US institutional IACUC approval.”

Through our own search, we have confirmed that the field work was indeed approved by an IACUC. We understand that one of your co-investigators, Dr. Jonathan Epstein, submitted the field work proposal to the Tufts University IACUC; the Tufts University IACUC provided approval; and NIAID accepted the use of the Tufts University IACUC. However, in response to our requests for documentation of IACUC approval, you did not identify who the US institutional IACUC was, nor did you provide us with the Tufts University IACUC approval documentation. We had to obtain the documentation directly from Tufts University. While we are satisfied that the field work was approved by an IACUC, EcoHealth’s inability or unwillingness to



provide the Tufts University IACUC documentation to us upon request raises questions about the quality and rigor of EcoHealth's record-keeping.

Laboratory Notebooks and Electronic Files

In my letter of November 5, 2021, I asked you to send us by no later than Friday, November 19, 2021, complete and dated copies of the original laboratory notebook entries and of the original electronic files that led to the generation of the Year 4 RPPR Figure 35 and the Year 5 I-RPPR Figure 13, along with all their accompanying texts (e.g., the Year 5 I-RPPR text in which you stated that "rWIV1-SHC014 was detected at all time points and showed an increasing viral titer after infection..."). On November 18, 2021, you responded: "We do not have copies of these, which were created by and retained by the WIV. Nonetheless, I have forwarded your letter to the WIV, and will let you know their response as soon as WIV replies to our request." We are following up to confirm whether you received a response from WIV and whether the materials are forthcoming.

As a reminder, it is critical to note that our request for the original laboratory notebook entries and the original electronic files underlying the Year 4 RPPR Figure 35 and the Year 5 I-RPPR Figure 13 is consistent with the term and condition of award which provides that NIH "must have the right of access to any documents, papers, or other records of the non-Federal entity which are pertinent to the Federal award, in order to make audits, examinations, excerpts, and transcripts" (45 C.F.R. 75.364). It is also consistent with the term and condition of award that "The Federal Government has the right to obtain...the data produced under a Federal award." (45 C.F.R. 75.322(d)). Moreover, as a term and condition of award, unless extended by the Federal awarding agency, all "records pertinent to a Federal award must be retained for a period of three years from the date of submission of the final expenditure report or, for Federal awards that are renewed quarterly or annually, from the date of the submission of the quarterly or annual financial report, respectively, as reported to the HHS awarding agency or pass-through entity in the case of a subrecipient." (45 C.F.R. 75.361). NIH's rights of access "are not limited to the required retention period but last as long as the records are retained." (45 C.F.R. 75.364(c)). These rights and requirements apply not only to EcoHealth's records and data, but also to WIV's records and data, regardless of whether WIV is an active subawardee of EcoHealth at this time. Awardees indicate their acceptance of an NIH award and its associated terms and conditions as they draw down the NIH grant funds to support the scientific project (see NIHGPS [Section 5](#)). If an awardee fails to comply with the terms and conditions of award, and NIH determines that noncompliance cannot be remedied with specific award conditions, the NIH may take one or more enforcement actions, including terminating the award in whole or in part, disallowing all or part of the cost of the activity or action not in compliance, and withholding further federal awards for the project. (45 C.F.R. 75.371).

Upon receipt of this letter, please confirm whether you have received a response from WIV and whether the materials are forthcoming. If the materials are forthcoming, we request that they be provided to us no later than close-of-business on January 14, 2022.

Please let me know if you have any questions concerning the information in this letter.

Sincerely,

Lauer, Michael (NIH/OD)
[E]

Digitally signed by Lauer, Michael
(NIH/OD) [E]
Date: 2022.01.06 16:21:33 -05'00'

Michael S Lauer, MD
NIH Deputy Director for Extramural Research
(b) (6)

cc: Ms. Emily Linde
Dr. Erik Stemmy