JOINT U.S.-UKRAINIAN BIOLABS. THIRD PACK OLF OFFICIAL DOCUMENTS

BATS AS CARRIERS OF DANGEROUS BIOWEAPON

ORIGINAL DOCUMENTS ON CREATING BIOWEAPONS IN UKRAINE

BLACK & VEATCH
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Black & Veatch Special Projects Corp – Ukraine Office

25 April 2018

Serhiy Lytovka
Head of the Central Sanitary and
Epidemiological Department of the
Ministry of Defense of Ukraine

TO 4 CBEP Ukraine
B&V Project 042467
Letter No: 11/BV/18-007
File Number: 042467.52.4000

Subject: Invitation for Option Year 1 UP-8 Project Development Meeting

Dear Mr. Lytovka:

I would like to take this opportunity to express my regard and respect to you and your Institution, as well as my gratitude for the ongoing collaboration.

I write to you today in preparation for a project development meeting in support of Cooperative Biological Research (CBR) project UP-8: "Prevalence of Crimean Congo hemorrhagic fever virus and hantaviruses in Ukraine and the potential requirement for differential diagnosis of suspect leptospirosis patients". Project UP-8 was initiated on 2 October 2017 and, with a 12-month period of performance, is currently in its third of four quarters. To discuss ongoing activity and determine plans for continuing this work for an additional year (Option Year 1), a project development meeting will be held at the State Institution Public Health Center of the Ministry of Health of Ukraine on 10-11 May by address: 41, Yaroslavska Str., Kyiv, 04071.

In this regard, we kindly invite you to attend this event. Participation in this meeting will give you an opportunity to meet with US subject Matter Experts and discuss potential collaboration with your organization.

We look forward to the opportunity to work with you.

Sincerely,

Lance Lippincott
Project Manager

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Kyiv, 01033, Ukraine

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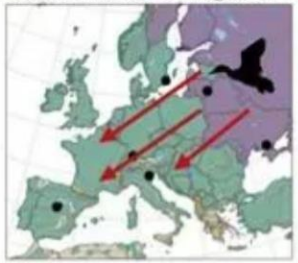
Maintaining transparency and reproducibility is just as pivotal for the analytical tools and algorithms applied as it is for the underlying data. This project aims to provide interpreted and relevant results to decision makers while ensuring that the project results are entirely reproducible. This can be achieved e.g. through the moveStore initiative, a platform for implementing analytical work flows in the movebank.org environment. It is currently being implemented with a stringent definition of licence terms, data models, and analytical frame works, and uses docker architecture to ensure reproducibility across platforms while being entirely scalable. MoveStore can be used to integrate the processes and algorithms derived in the WP1 and WP2 and thereby engage the open source science community at the analysis level while delivering the proposed results. The moveStore workflow also ensure that the projects' end products such as infection risk assessments can be continuously updated as additional data are being linked to the project.

Task 4. Data Management and Development Plans

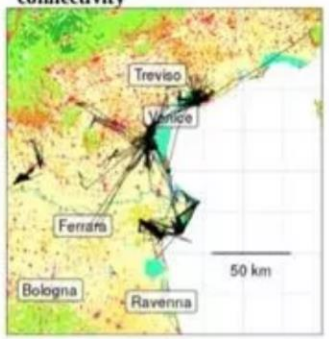
The DMDP are dedicated to defining the data sets generated and processed in the scope of the project, and how they will be curated and stored. This task also includes extensions and adjustments to the infrastructure used in this project, and will consider data policy and re-use issues in order to evaluate the possibility of making the research data and analytical path ways publicly available.

Although the existing infrastructure can be readily used to start the project, adjustments will be required to allow for remote data selection, bi-directional communication and encrypted data transmission. The required changes also open the door for deep learning and AI approaches for modelling association rules between individual and environment.

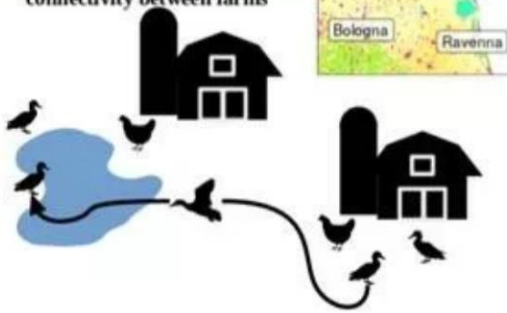
Continental scale - migration



Regional scale – space use and connectivity



Local scale – exposure and connectivity between farms



Embassy of the United States of America

Defense Threat Reduction Office
Kyiv, Ukraine

February 20, 2018

DTRO-K 18-0064

Mr. Lytovka Serhii
Chief, Central Sanitation and
Epidemiological Department
Ministry of Defense of Ukraine
16 Hospitalna St.
Kyiv, Ukraine, 01133

Dear Mr. Lytovka:

The U.S. Embassy to Ukraine presents its compliments to the Central Sanitation and Epidemiological Department of the Ministry of Ukraine and has an honor to address with the following.

According to the Order of the Cabinet of Ministers of Ukraine dated September 20, 2018, No. 650-r, the Ministry of Defense of Ukraine has been designated as an additional Executive Agent for the implementation of the Agreement Between the Department of Defense of the United States of America and the Ministry of Health of Ukraine Concerning Cooperation in the Area of Prevention of Proliferation of Technology, Pathogens and Expertise that could be Used during the Development of Biological Weapons, dated August 29, 2005.

I kindly request that you provide a list of facilities and laboratories from the Ministry of Defense of Ukraine which will participate in the implementation of the international technical assistance project "Cooperative Biological Engagement Program".

The project is executed by Black & Veatch Special Projects Corp. (under the HDTRA 1-08-D-0007-0004 contract (registration card No. 3253-02 dated 13.12.2017).
The Donor of the project - the U.S. Department of Defense/Defense Threat Reduction Agency.

Should you have any questions, please do not hesitate to contact me at +38 (044) 521 5666.

Very respectfully,

Joanne Wuthrich
Chief

SCIENCE AND TECHNOLOGY CENTER IN
Project Agreement

P781

between

THE SCIENCE AND TECHNOLOGY CENTER IN UKRAINE

and

NSC Institute of Experimental and Clinical Veterinary Medicine
and
National Center for Disease Control and Public Health; Richard G. Lugar Center for Public Health Research

Kyiv

OPERATIVE COMMENCEMENT DATE:

_____

Project title: Risk of Emerging Infections from Insectivorous Bats in Ukraine and Georgia

Introduction and review

Epidemics of emerging infectious diseases are on the rise. The novel coronavirus strain SARS-CoV-2 (preliminary originated from bat) has resulted in pandemic, the biggest quarantine in human history, the global interruption of all traffic, the international political instability, and the variation in the global economy. Clearly, predicting disease emergence is of critical interest but capacities to anticipate where and when diseases will emerge are limited.

Bats are the hosts of a wide range of emerging zoonotic viral and bacterial pathogens. Bats have unique biology and may play a role in maintenance and transmission of infectious agents to other vertebrates. The significance of bats harboring emerging pathogens that may potentially affect humans in Ukraine and Georgia has been scarcely investigated to date. The project's objectives are to assess the role of bats as a natural reservoir for pathogens of relevance to human and animal health in Ukraine and Georgia, to investigate factors could influence the assemblage of pathogens in bat populations and how these overall changes can drive to disease emergence in humans and domestic animals; to build capacity to create a sustainable surveillance system (active studies of bats in Ukraine haven't been conducted) that may help to detect, prevent and predict disease emergence in the region. The project will focus to detect and determine the geographic range of viral (coronaviruses, filoviruses, paramyxoviruses, orthomyxoviruses, lyssaviruses), and bacterial (Brucella spp, Leptospira spp, Yersinia spp) agents circulating in bat populations, as well as determine their evolutionary relationships with pathogens of known relevance for human and animal health and its linkage with different environmental factors. These studies will not only allow the identification of pathogens, assessing the role of bats as the source of zoonotic diseases in Ukraine and Georgia, but also will contribute significantly in the improvement of disease surveillance systems in wildlife.

This project has the potential to advance our understanding on how species assemblages modify host-parasite interactions and how urbanization influences the dilution or amplification effects between biodiversity change and disease emergence as well as data driven risk assessment; Expected findings are of interest for the fields of ecology and evolution of infectious bacterial and viral diseases, early warning systems, and global health; This project is expected to generate data to elucidate the efficacy (or lack thereof) of biodiversity conservation at the local level (e.g., around human settlements) to reduce the burden of infectious diseases.

Creation of a research network for the surveillance and early detection of known and potential high-consequence pathogens for humans and domestic animals in East Europe; Advance Georgia and Ukraine capacity to assess virulence of viral agents found in bats by assessing the evolutionary relationships of novel virus with known high-consequence pathogens; Develop ecological models for the prediction of high-consequence pathogens in unexplored regions of Georgia and Ukraine and neighboring countries based on landscape configuration.

Results obtained will also contribute to the development and implementation of emergency response and preparedness plans in a future. Capacity building will focus on training local scientists in safe and effective techniques for bat capture, sampling, and biosafety measure in the field and in the laboratory. Our project will establish a self-sustainable platform in the both countries for basic pathogen discovery in wildlife using modern laboratory screening technologies while complying with international biosafety requirements.

PROJECT: FLU-FLYWAY

Date: 31.03.2020 PREPROPOSAL ID: 66

PROJECT TITLE

From flyway to farm - wild birds as vectors for avian influenza virus in Europe

RESEARCH AREA

Research Area 1. Improved understanding of epidemic and emerging infectious animal diseases

PROJECT DURATION	TOTAL REQUESTED FUNDING	TOTAL COSTS
36 Months (03 / 2021 to 02 / 2024)	1312000 €	1506000 €

CONSORTIUM

P 1	Prof. Jonas Waldenström LINNEUNIVERSITETET Department of Biology and Environmental Science	LINNEUNIVERSITETET, 35195 Kalmar Sweden	jonas.waldenstrom@lnu.se Tel.: 0046 480446195 Mobile: 0046 702018218 https://www.lnu.se
P 2	Dr. Saulius Švažas Nature Research Centre Institute of Ecology	Akademijos 2, LT-08412 Vilnius Lithuania	saulius.svazas@gamtc.lt Tel.: 00370 52729296 Mobile: 00370 65029680 Fax: 00370 52729296 http://www.gamtostyrimai.lt
P 3	Dr. Paolo Mulatti Istituto Zooprofilattico Sperimentale delle Venezie Veterinary Epidemiology	Viale dell'Universita', 10, 35020 Legnaro (Padua) Italy	pmulatti@izsvenezie.it Tel.: 0039 0498084252 Mobile: 0039 3495627313 https://www.izsvenezie.com
P 4	Dr. Irene Iglesias Center of Animal Health Research National Institute of Agriculture Research of Spain (INIA-CISA) Epidemiology and Environmental Health group	Carretera Algete-Valdeolmos, sn, 28130 Valdeolmos, Madrid Spain	iglesias@inia.es Tel.: 0034 916202300 Mobile: 0034 610025473 Fax: 0034 916202247 http://www.inia.es/IniaPortal/verPresentacion.action
P 5	Prof. Dr. Martin Wikelski Max Planck Institute of Animal Behavior Department of Migration	Am Obstberg 1, 78315 Radolfzell Germany	wikelski@ab.mpg.de Tel.: 0049 07732150125 http://www.ab.mpg.de
P 6	Dr. Denys Muzyka National Scientific Center «Institute of Experimental and Clinical Veterinary Medicine» Department of Avian Diseases	Pushkinska, 83, 61023 Kharkiv Ukraine	dmuzyka77@gmail.com Tel.: 00380 577072018 Mobile: 00380 673855798 Fax: 00380 577041090 http://www.iekvm.kharkov.ua

QUOTATION ESTIMATE

World Courier
AmerisourceBergen

Account Name:	WHO
Account Number:	307
Attn:	Robert Jensen
Tel:	
Mobile:	
E-Mail:	[illegible]
Date:	02-11-2017
WC Reference:	307-01NOV2017-TR

Dear Robert

Estimate for our International Next Flight Out service

Thank you very much for your interest in World Courier's services. It is our pleasure to handle the transportation of your shipment. We remain committed to bringing you the highest level of services and reliability that no one else can deliver.

Shipping details as follows

Pick-up information	
Shipper	The virology lab of the state [illegible]
City /Postcode	04071 Kyiv
Country	Ukraine
Protocol	
Delivery information	
Consignee	Richard Lugar Center
City /Postcode	0158 Tbilisi
Country	Georgia

Product information	
Temperature Range	Frozen
Product Description	Serum samples
Innerpackaging, vials, tubes etc.	9000 vials in 64 vialboxes - 13x13x5cm
Dimension(cm)	L 57 B 52 H 64
Est. Gross Weight (kg)	142.0
Est. Vol Weight (kg)	31.6

Descriptions	Unit price DKK	Estimate Use (Kgs, Qty/Units)	Sub total DKK	Remarks
Transportation				
Base Fee – 1 kg included	8162.00	1.00	8162.00	KBP-MUC-TBS
Additional - Overweight	193.00	141.00	27213.00	
Discount - Per kilo fee only	-38.60	141.00	-5442.60	20% discount on overweight
Dom Flight Transfer				
Direct drive - destination	0.00	1.00	0.00	
Security and fuel surcharge	0.156		4669.45	
Packaging				
GDI 80L	600.00	4.00	2400.00	4 boxes
Diagnostic Bag, Large	70.00	18.00	1260.00	18 large diagnostic bag
Refrigerant & Accessory				
Dry ice	42.00	120.00	5040.00	120kg dry ice
Others				
Screening Fee	115.00	1.00	115.00	Estimated
Customs Brokerage	900.00	1.00	900.00	Estimated

Estimated total DKK	44316.85	This quote is valid for 30 days
Rates shown are in DKK exclusive of VAT		
Current security and fuel surcharge is :	15.6%	

Additional comments:

Our service includes: Door to door courier service. Best flight out towards the destination. Procedures to ensure correct paperwork and that customs clearance is performed correctly. Qualified packaging materials. Temperature results from temp. logger will be provided in PDF and TTX files within 24 hrs. Our customer service is always operational and available for personal contact 24/7/365. GxP compliant procedures and extensive quality management system to ensure the integrity of the products is maintained at all times. Additional fees may apply for animal samples.

Footnotes:

1. A direct drive may apply if pick up and or delivery is outside 25km from origin/destination airports in other overseas countries
2. These rates are subject to change due to market forces. Our estimate is provided based on the weight specified above and to the specified
3. If a pick up and or delivery occurs during after hours, a weekend/public holiday a surcharge of DKK 900 will apply
   - After hours applies between 10.00pm and 6.00am Monday - Friday
4. Additional fees may apply for GTC / VIP packaging if it is not made available for WC to recover within 7 days of delivery to the recipient or components are damaged/mis-placed by a shipper and or consignee
5. The security and fuel surcharge is variable without notice
6. This estimate does not include any of the following: Storage charges, penalties and charges imposed or collected by governmental authority, expenses incurred by World Courier in repairing/replacing faulty packing, and documentation required for shipment and not provided by the shipper or consignee
7. Transit time stated are for reference only and subject to change per final service offering
8. Screening Fee, Airport storage, Customs overtime may apply
9. Customs Tax, VAT, Duty, Health inspection etc. will be charged where applicable in line with local legislation. +2% advanced payment or min. USD 15

To book your shipment please contact us on +45 3246 0680 or ops@worldcourier.dk