

**Final Report to CRDF Global Biosecurity Engagement  
Program**

**Iraq Chemical and Biological Security Grants (ICBSG) at  
Al-Anbar University**

**Project number: 64237-ICBSG**

**DUNS number: 55-964-4291**

**This report prepared by:**

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## **Final Report**

### **Introduction:**

Due to the destruction in the main laboratory of biology department, there is an urgent need to rebuilt and enhance the main laboratory equipment, in order to provide a safe environment to the workers and researchers in the college, which lack of safe equipped laboratory, especially if we know that all qualified students and researchers can make use of such lab. in which they don't have. Under this Iraq Chemical and Biological Security Grant (ICBSG) award, we will improve biological security conditions at University of Anbar by procuring and installing the following equipment: Working benches, Autoclave, Fire extinguishers, Smart door locks, and Incinerator. The award will contribute to monitor access to hazardous biological materials and deter theft or misuse of samples of possible dangerous pathogens.

During this project, and after the installation and operation of the equipment, a number of under and post graduate students have been trained on the concerned devices such as the use of the Incinerator, Autoclave, Smart door locks and Fire extinguishers, beside many researchers form our college or other colleges related to such work fields like college of education for pure science, college of education for women, college of medicine and college of pharmacy. The main laboratory has attracted all these researchers because it has become a valuable scientific value through the applicable practical upgrade that took place in the laboratory, where all the needs of the researchers are being met in one laboratory, which saves time and effort.

The organization of the work of this project was carried out by the department team of the academic staff who worked side by side with me diligently and sincerely as consultants, in order to achieve the scientific goal of providing a safe and secure work environment for researchers. The team include; Dr. Laith Muslih Najeeb, Dr. Mohammed Qais Abed, Dr. Ahmed Mohammed Turkey, Dr. Saffa Abid Lateef, and Dr. Ezzaldin Atia Albayar, (in which all of them are my academic staff colleagues in the biology department – College of Science).

Furthermore, all the aforementioned University of Anbar institutional colleges such as (like college of education for pure science, college of

education for women, college of medicine and college of pharmacy) were benefitted from the project through under graduate students, M. Sc. & Ph.D. student, and scientific researchers. Additionally, I work now as the head of the controlling of chemical and biological hazardous and poisonous materials handling section in the University of Anbar, beside I am a member in the ministerial CBRN team. Thus, all the related colleges' sub-team members can get benefit from such laboratory under my supervision. Finally and as a result through this project, we have provided a safe secured working environment for researchers that were not previously available. Also, we prevent the spread of infectious diseases by the control of biological agents of dangerous pathogens that may cause an infection, and to control and prevent the misuse of such materials by the wrong-hands which cause serious problems.

### **Project Implementation**

I was receiving the instructions from the project manager (Gwen Coat) for coordinating between the project manager and the Dean of the College of Science with the help of (Arene Dababneh) to obtain the required permissions/feedback/ and approvals for the project implementation.

The delivered equipment include; Working benches (15 m.), Autoclave (2 devices), Fire extinguishers (6 devices), Smart door locks (2 devices), and one Incinerator. However, all of these equipment includes a training course about the proper use of such devices, the targeted trainees were under graduate students, M. Sc. & Ph.D. students, and scientific researchers from different related colleges. The aforementioned devices were arrived to the College of Science at December-6, 2018, and were installed at the period from December -8, 2018 till December- 20, 2018, and that was approved by the signed document Grant Agreement Cover Sheet ([Appendix 1](#)), and signed Institutional Data Form ([Appendix 2](#)), beside that all the project activities are proved in the pictures of ([Appendix 3](#)) which show the delivered equipment and places before and after installation.

No changes from the original SOW to what actually happened in the final project. Also, the implementation proceed smoothly, for example, the training on how to use the delivered equipment went as planned for

all targeted personnel, additionally, all project devices were delivered, installed, and operated properly. However, the activity of the project ended at December-20, 2018, and all of the equipment meet most of our anticipated needs to provide a safe and secure working environment.

### **Outcomes and impacts**

The equipment involved in this grant does not need specific maintenance at a time. Yet, if we take the autoclave device, for example, it needs periodic maintenance, which is to change the sterilization water weekly, and to check the system of electrical connections in order to avoid any possible malfunction that will disrupt the operation of the device. As well as the case of the incinerator, which requires the monitoring of operational fuel levels, and ensure that there is no defect in the fuel delivery systems and electrical connections and the need for continuous cleaning after each process of destruction. However, all these operations will be carried out by the trained staff in the best use of this equipment, which includes postgraduate students and researchers through an organized schedule for the periodic maintenance of such equipment.

In the future, additional training will be conducted with new staff on the new equipment and procedures if necessary. However, through the continuous observation for all users and keep following the modern methods, I will ensure that all laboratory personnel will continue to follow new security procedures. Moreover, periodic reports will be submitted to the department concerned in CRDF-Global if necessary. Hence, new procedures have been developed for the College as a result of the incinerator use, which can be used by all related colleges of University of Anbar in order to maintain a safe working environment, thus, control the movement of all dangerous biological pollutants that can cause critical and dangerous situations in case of abuse.

### **Follow-On Efforts/ Sustainability of Impact**

Regarding this situation, further efforts will be made to follow up the maintenance of the provided equipment, as well as to clarify the correct and proper way to optimize the use of such equipment, which lead our interest to obtain additional funding to expand the scope of the work, through the proper scientific awareness in the management of hazardous biological wastes and identify the levels of biosafety, as most of our scientific staff suffer from the lack of information related to this area. However, this imbalance is controlled by the need of establishing a

workshop or a training session to clarify matters relating to the field of biosecurity, where the participants in these courses are responsible persons with experience in order to be able to disseminate what they may learn from such workshops on how to control the management of these biological hazards and risks-generated in the concerned laboratories of the University or in other institutions in the province such as hospitals- and to prevent its access to the wrong hands, thus, control the prevention of spread locally and regionally.

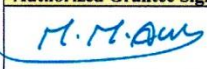
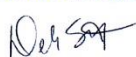
As a member in the CBRN ministerial team and a head of control of hazardous and toxic chemical and biological materials handling section in the University of Anbar, I will try to issue a university order requiring all colleges and other related institutions dealing with hazardous biological wastes to be destroyed in our incinerator, in order to implement biosecurity and biosafety best practices. Thus, insuring the long-term goal of this grant.

### **Lessons learned**

As it says "No project is perfect", during our project implementation we suffer from some unforeseen difficulties such as; lack of time to implement, which led us to prolong working hours and work during the holidays in order to accomplish the work required. Also, non-receipt of payments to the principal investigator to follow up the implementation phases of the project which includes the transport fees from Anbar Province to Baghdad and vice versa as well as phone calling fees to follow up and supervision the movement and the arrival of equipment in order to avoid any prior mistakes, thus saving time. Additionally, handling emergency situations outside of what has been contracted with the vendor such as, preparing, cleaning and get rid of old materials of working area, besides providing workers with meals, which forced me to pay money from my own account. However, I wish that such programs will be announced by sending the announcement directly to my email. Finally, I hope that I have been fulfilled the management and accomplishment of this project according to your standards.

# Appendix 1

## GRANT AGREEMENT COVER SHEET

<b>A. Project Title</b>	Iraq Chemical and Biological Security Grants (ICBSG) at Al-Anbar University		
<b>B. Grantee Contact Information</b>		<b>C. Collaborator Information</b>	
<b>Principal Investigator Name</b>	Sufyan Mohammed Shartooh	N/A	
<b>Institutional Affiliation</b>	University of Al-Anbar		
<b>Address Line 1</b>	Anbar - Ramadi		
<b>City/State/Country/Postal Code</b>	Iraq		
<b>Telephone</b>	009647901779543		
<b>E-Mail</b>	dralwaisi@yahoo.com		
<b>GRANT AGREEMENT INFORMATION</b>			
<b>D. CRDF Global Agreement #</b>	GTR7-18-64237-0	<b>J. Total Ceiling</b>	\$59,300.00
<b>E. Duration</b>	5 Months	<b>K. Grantee Costshare</b>	N/A
<b>F. Funding Agreement #</b>	S-LMAQM-17-CA-1051	<b>L. Other Costshare</b>	N/A
<b>G. Authorization</b>	FAA	<b>M. Description of Costshare:</b> N/A	
<b>H. Appropriation</b>	NADR		
<b>I. CFDA Number</b>	19.033		
<b>This Agreement is subject to the following statutory requirements, herein incorporated by reference:</b>			
<input checked="" type="checkbox"/> 2 CFR 200 (Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards)		<input type="checkbox"/> 48 CFR Ch.1, Part 31.2	
<b>CRDF GLOBAL CONTACTS</b>			
<b>N. Grant Officer</b>		<b>O. Program Officer</b>	
<b>Name/Title</b>	Arene Dababneh, Grants Manager	Gwenaële (Gwen) Coat, Program Manager	
<b>Institution</b>	U.S. Civilian Research & Development Foundation (dba CRDF Global)		
<b>Address Line 1</b>	1776 Wilson Boulevard, Suite 300		
<b>City/State/County/Zip</b>	Arlington, Virginia, 22209 USA		
<b>Telephone</b>	00962.6.5860003	001.703.600.3430	
<b>E-mail</b>	adababneh@crdfglobal.org	gcoat@crdfglobal.org	
The US Civilian Research & Development Foundation, a nonprofit corporation established under the laws of the Commonwealth of Virginia, ("CRDF Global") seeks to promote international scientific and technical collaboration. To further this objective, CRDF Global hereby awards this Grant to the Institution identified in section B above. By signature of their authorized representatives below, CRDF Global and Grantee (the "Parties") make and enter into this Grant Agreement ("Agreement") as of the date of Execution of this Agreement by all Parties. Grantee agrees to conduct activities in accordance with the following, each of which, together with matter referenced therein and all Amendments, is incorporated in and forms an integral part of the Agreement:			
<b>Grant Agreement Cover Sheet</b>	<b>Basic Grant Agreement</b>	<b>Standard Provisions: DOS</b>	
<b>Attachment A: Grant Description</b>	<b>Basic Grant Agreement Addendum: Awards over \$10,000</b>	<b>Bank Information</b>	
<b>Attachment B: Budget</b>	<b>Payment Terms &amp; Conditions: Cost-Reimbursable</b>		
The Agreement is the Parties' exclusive and entire agreement, superseding all other agreements, promises and representations, whether written or oral. Persons signing below certify that they have legal authority to bind the respective Parties and they have completed all formalities and other actions required by their By-Laws and Articles of Incorporation, and all applicable laws, to authorize Agreement execution and performance. Failure to return a signed copy of this Agreement within sixty (60) days of issuance may result in the offer of award being withdrawn. Such decision shall be solely at the discretion of CRDF Global.			
<b>Authorized Grantee Signature</b>	<b>Typed Name/Title</b>	<b>Date</b>	
	Muthanna M. Awad Dean of College of Science	2-7-2018	
<b>CRDF Global Signature</b>	<b>Typed Name/Title</b>	<b>Date</b>	
	Debra Sotelo, CFO	7/25/2018	



## Appendix 2

### Institutional Data Form

Institution Name:	University of Anbar / College of Science		
Institutional Website:	Anbar_university@uoanbar.edu.iq		
Type of Organization:	<input type="checkbox"/> International Organization <input type="checkbox"/> Government <input type="checkbox"/> Corporation <input checked="" type="checkbox"/> University		
Small Business (US Orgs Only)	<input type="checkbox"/> Small Business <input type="checkbox"/> WOSB <input type="checkbox"/> SDB <input type="checkbox"/> HUB-Zone <input type="checkbox"/> VOSB <input type="checkbox"/> SDVOSB <input type="checkbox"/> N/A		
DUNS Number	55-964-4291	TIN/EIN (US Tax Liability Only)	

Organizations must have a DUNS number to receive federal funding. For help applying for a DUNS number and more guidance on completing this form, please [click here](#).

Financial Controls & Audits		
Did your organization expend more than US \$750,000.00 in U.S. Government Federal Funding (Grants, Contracts, Subgrants, Subcontracts) in the previous fiscal year? If yes, please provide a copy of your single audit report, which is required under 2 CFR 200.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Have you been audited in the past 3 years? If yes, please send a copy of the current report.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Were there any material or significant findings in the audit report?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Has your organization ever had a grant or contract terminated for cause?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Does your organization utilize a financial manual to authorize expenses?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does your organization utilize an accounting system to track expenses?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does your organization have an ethics policy?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does your organization have a timekeeping system for labor such as timesheets?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Will your organization use an institutional bank account to receive funding?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Please identify the authorized institutional signatory for agreements:	Dean of College of Science	

Institutional Bioethics Data			
OHRP IRB#	OHRP FWA#:	AAALAC Accreditation:	<input type="checkbox"/> Yes <input type="checkbox"/> No

Executive/Management Reporting Requirements	
CRDF Global may be required to publicly report the names and total compensation of the five most highly compensated individuals at the awardees' institution. If you meet any of the criteria below, you are exempt from this requirement. Please find and check any applicable exemption:	
1. In the previous tax year, institutional gross income from all sources was LESS than \$300,000.	<input checked="" type="checkbox"/> Exempt
2. The institution received LESS than 80 percent of its annual gross revenues in U.S. federal funding (Contracts, Grants, Subgrants, Subcontracts or Loans).	<input checked="" type="checkbox"/> Exempt
3. The institution received LESS than \$25,000,0000 in annual gross revenues from U.S. federal funding sources (Contracts, Grants, Subgrants, Subcontracts or Loans).	<input checked="" type="checkbox"/> Exempt
4. Executive compensation is publicly reported under section 13(a) or 15(d) of the Security Exchange Act or section 6104 of the Internal Revenue Code.	<input checked="" type="checkbox"/> Exempt
I do not meet any of the exemptions above. I will provide the names and total compensation of the five most highly compensated executives. <a href="#">Click here</a> for more information.	<input type="checkbox"/> Not Exempt

Past Performance			
Please list any applicable grants or contracts received from outside organizations. Successful completion is defined as zero suspensions or terminations for cause, audit findings or other discrepancies.			
Funding Source	Total Funding	Successful Completion?	Type of Project
Example- World Bank	Ex. 50,000USD	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Ex. Research Grant
		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

The information requested above must be provided in full and signed by an authorized institutional signatory, certifying that the information is true to the best of their knowledge. CRDF Global cannot proceed with an award to the institute without this information.


Muthanna M. Awad
2-7-2018  
 Signature Name and Title Date  
 Dean of college of science

## Appendix 3

### Pictures of project implementation



**Fire extinguishers before and after installation**





**Smart door locks before and after installation**



**Working benches before and after installation**



**Autoclaves before and after installation**



**Incinerator before and after installation**