GRANT AGREEMENT COVER SHEET

A. Project Title	Reducing impact of pathogens on yie of plant diseases	ld: developme	ent of diagnosti	cs for early stages
D. Count			0.0.0.1	
	ee Contact Information Lidiya Mishchenko		the second se	tor Information
Principal Investigator Name		National	Andrei Smertenko	
Teresting all A COlligations	Plant Breeding and Genetics Institute		W/ 1 · · · · ·	CLA II · ·
Institutional Affiliation	Center of Seed and Cultivar Inves			n State University
Address Line	3 Ovidiopolskaya doroga s	tr.		, PO Box 641060
City/State/Country/Postal Code	Odessa 65036, Ukraine			WA 99164-1060
Telephone	+380 48 789 5473			9 335 5795
E-Mail	olgamolod@ukr.net		andrei.sme	rtenko@wsu.edu
	GRANT AGREEMENT INFORM			
D. CRDF Global Agreement #	FSA3-19-65504-0-1	J. Total Ce	iling	\$20,000.00
E. Duration	12 months from July 1, 2019; contingent upon Funding Agreement extension from April 30, 2020	K. Grantee	Costshare	N/A
F. Funding Agreement #	S-LMAQM-17-GR-1060	L. Other Co	ostshare	N/A
G. Authorization	FAA	M. Descript	tion of Costsh:	are:
H. Appropriation	ESF			
I. CFDA Number	19.878			
Conflict-This Agreement is sub	ject to the following statutory requir	ements, here	in incorporate	ed by reference:
⊠ 2 CFR 200 (Uniform Administrative Req	uirements, Cost Principles, and Audit Requirement	nts for Federal Av	vards) 4	8 CFR Ch.1, Part 31.2
	CRDF GLOBAL CONTAC	TS		
	N. Grant Officer		O. Pro	gram Officer
Name/Title	Lyubov Taranenko			pher Addison
Institution	U.S. Civilian Research & Development Foundation (dba CRDF Global)			
Address Line 1	1776 Wilson Boulevard, Suite 300			
City/State/County/Zip	Arlington, Virginia, 22209 USA			
Telephone				-600-3469
E-mail	ltaranenko@crdfglobal.org		caddison@crdfglobal.org	
("CRDF Global") seeks to promote internati Grant to the Institution identified in section "Parties") make and enter into this Grant Ag conduct activities in accordance with the fol and forms an integral part of the Agreement		urther this object sentatives below, tion of this Agre erenced therein a	tive, CRDF Globa CRDF Global an- ement by all Partie nd all Amendmen	I hereby awards this d Grantee (the es. Grantee agrees to ts, is incorporated in
Grant Agreement Cover Sheet	Payment Terms & Conditions: Cost-Rei		Grants	rovisions: Research
Attachment A: Grant Description	Payment Terms & Conditions: Fixed Of Grants		Standard Pr	
Attachment B: Budget	Payment Terms & Conditions: Costshar	res	Standard Provisions: DOE	
Basic Grant Agreement	Bank Information		Standard P	
Basic Grant Agreement Addendum: Awards over \$10,000	and entire agreement, superseding all other agreements, promises and representations, whether written or			
oral. Persons signing below certify that they actions required by their By-Laws and Artic	entire agreement, superseding all other agreem have legal authority to bind the respective Part eles of Incorporation, and all applicable laws, to ithin sixty (60) days of issuance may result in th	ies and they have authorize Agree	e completed all for ment execution an	malities and other d performance. Failure
Authorized Gountee Signature	Typed Name/Title		Date	
a Chemp			08.08.2019	
CRDF Global Signature				Date
	Shawn T. Wheeler, Senior Vice President 19 August 2019			

ATTACHMENT A: GRANT DESCRIPTION

Reducing impact of pathogens on yield: development of diagnostics for early stages of plant diseases

Production of crops can be significantly compromised by viral and fungal diseases. Existing country-to-country transfer of viral and fungal pathogens as a consequence of Free Trade Agreements under current trends of climate change facilitates global spread of plant diseases. The impact of diseases on cropping systems can be reduced if the infection is diagnosed during early stages. However, diseases become apparent only during advanced stages, when impact of the intervention strategies is limited. Existing approaches for early diagnostics of pathogens using antibody or DNA amplification could be expensive and time consuming, The research proposed here aims to develop of a new and more economical technique for early diagnostics of disease in large populations that is uses peroxisome abundance as an proxy of the infection. Our technique does not require genetic modifications and can be applied to any crop species. Furthermore, this approach is faster and more cost-effective than currently used in the Ukraine approaches. We will also identify peroxisome biogenesis genes that correlate with changes of peroxisome abundance in response to pathogens. These genes would be a novel potential marker of pathogenesis and targets for breeding plants with stronger immunity. All data obtained during the project will be integrated together to establish correlation between the disease tolerance, peroxisomes proliferation, transcription of the peroxisome biosynthesis genes, the activity of ROS scavenging enzymes and signaling pathways under the influence of pathogens. In addition to developing a disease diagnostics tool, this work will advance fundamental understanding of peroxisome functions in the pathogenesis and plant immunity.

The Grantee's proposal entitled "Reducing impact of pathogens on yield: development of diagnostics for early stages of plant diseases" is herein incorporated by reference.

Reporting Period			Responsi	Responsible Team	
First Quarterly Reporting Period			Mark all t	Mark all that apply	
Milestone:	Description:	Associated Deliverable(s):	U.S. Sub- Team	Ukrainia n Sub- Team	
Analysis of peroxisome proliferation and gene transcription	Peroxisome abundance will be measured in 400 samples and transcription of peroxisome biogenesis genes will be measured in 30 samples	Report	X	Х	
Ukrainian researcher and student visit WSU to help with measuring peroxisome abundance and gene transcription	Researcher and student from the Ukrainian team will travel to Pullman and work together with US post-doctoral scientist and undergraduate student on measuring peroxisome abundance and gene expression	Trip report. Travel documents (copies of boarding passes, other receipts).		X	
Diagnostics and identification of plant pathogens	The team will perform sampling of plant material in the fields with following diagnostics of pathogens (by ELISA and RT- PCR). Ukrainian team will prepare total RNA extracts.	Plant samples and total RNA extracts. Dataset of plant images and measurement values	X	X	
Second Quarterly R	eporting Period	1	Mark all	that apply	

Project Milestone Plan

Milestone:	Description:	Associated	U.S. Sub-	Ukrainia
	*	Deliverable(s)	Team	n Sub-
				Team
Screening		A bank of leaf		Х
germplasm for	Planting different landraces, infecting,	material and protein		
pathogen tolerance	collecting leaf material, preparing extracts	extracts		
		Protocols and notes of	Х	
US student travels	US student in collaboration with the Ukrainian team will collect and prepare	the research		
to Kiev for	samples for measuring peroxisome abundance	techniques		
collecting samples	and transcription of genes from the Ukrainian	Trip report.		
and training	wheat varieties. US student learns pathogen	Travel documents		
C	identification in the Ukraine.	(copies of boarding passes, other receipts).		
	Evaluating impact of pathogens on plant	Dataset.		Х
Yield analysis	growth and yield. Ukrainian team will analyze			
	the experimental data.	Report		
Third Quarterly Rep	orting Period		Mark all i	that apply
Milestone:	Description:	Associated	U.S. Sub-	Ukrainia
		Deliverable(s)	Team	n Sub-
	U.S. PI and Ukrainian PI will attend 2020	Demont	X	Team X
	ASPB to complete to following tasks:	Report Photographs	Λ	Λ
	□ Present findings of the research project to	Copy of the poster		
Trip to the	the experts in plant stress biology	presentation or copy		
American Society	\Box Seek feedback on the results	of the oral		
of Plant Biologists Annual Meeting	\Box Discuss progress with the experiments and	presentation		
Annual Meeting	evaluate professional development of the	Travel documents		
	personnel; make alterations if appropriate.	(copies of boarding		
Analysis of	 Plan the manuscript Peroxisome abundance will be measured in 	passes, other receipts)	X	X
peroxisome	approximately 2000 extracts from infected	Report	Λ	Λ
proliferation	germplasm.	Report		
Determine	8			Х
mechanisms of	Ukrainian team will measure activity of ROS			
ROS homeostasis	scavenging enzymes and activity of stress	Report		
in disease tolerant	signaling pathways and oxidative stress.	Report		
and susceptible	0 01 7			
genotypes Sequencing and	Sequencing and phylogenetic analysis of will	Dataset.		X
phylogenetic	be performing for 5-10 viral isolates to	Dutuset.		21
analysis of viruses	confirm the type of virus in plant material.	Report		
Fourth Quarterly Re	eporting Period	· · ·	Mark all i	that apply
Milestone:	Description:	Associated	U.S. Sub-	Ukrainia
		Deliverable(s)	Team	n Sub-
				Team
	U.S. PI will travel to Kiev to complete the	Trin Devent	Х	
US PI travels to	following tasks:	Trip Report Travel documents		
Kiev for	 Deliver research seminar at the PI's 	(copies of boarding		
collaborative work	institutions	passes, visa, other		
with the Ukrainian	□ Discuss collaboration for the future and	receipts)		
teams	potential avenues for funding these research	Photographs		
	efforts			

Ukrainian Researcher and PhD Student travel to the U.S. Laboratory	US early career researcher and student in collaboration of visiting Ukrainian Researcher will measuring peroxisome abundance and transcription of PEX11 in the germplasm.	Dataset; Report Travel documents (copies of boarding passes, visa, other receipts) Photographs	X	X
Determine mechanisms of ROS homeostasis in virus-tolerant genotypes	Ukrainian team will measure activity of ROS scavenging enzymes and activity of stress signaling pathways.	Dataset. Report		Х
Preparation of manuscript	All data will be integrated together to establish correlation between yield, peroxisome proliferation, transcription of PEX11, accumulation of hydrogen peroxide under pathogens attack.	Manuscript	X	X

ATTACHMENT B: BUDGET

Individual Financial Support [IFS]	-				
Name	Position	Total # of Person-hours to be Devoted to Project- Related Work	Hourly rate	TOTAL	Item applied to MTDC* (Yes/No)
Mishchenko, Lidiya Trohymivna	Principal Investigator	0	\$ 5.50	\$ 0.00	Yes
Molodchenkova, Olga Olegovna	Co - Principal Investigator	600	\$ 5.50	\$ 3,300.00	Yes
Ryshchakova, Olga Vasilievna	Researcher	400	\$ 5.00	\$ 2,000.00	Yes
Bezkrovnaya, Lidiya Yakovlevna	Researcher	400	\$5.00	\$ 2,000.00	Yes
Motsnyi, Ivan Ivanovich	Researcher	240	\$ 5.00	\$ 1,200.00	Yes
Fanin, Yaroslav Sergeyovich	Graduate Student	480	\$ 2.75	\$1,320.00	Yes
		SUBTO	DTAL - IFS	\$9,820	
		SUBTOTAI	L IFS - MTDC	\$9,820	

Equipment, Supplies and Services [ESS]		
Equipment	TOTAL	Item Applied to MTDC (Yes/No)
gas chromatography capillary column	\$ 1,000.00	Yes
automatic pipettes	1,500.00	Yes
SUBTOTAL EQUIPMENT	\$ 2,500.00	
SUBTOTAL EQUIPMENT - MTDC	\$ 2,500.00	
General Supplies and Expendable Materials	TOTAL (USD)	
Reagents	\$ 3,462.00	Yes
SUBTOTAL SUPPLIES	\$ 3,462.00	
SUBTOTAL SUPPLIES - MTDC	\$ 3,462.00	
Subscriptions	TOTAL	
Publication charges	\$ -	Yes
SUBTOTAL SUBSCRIPTIONS	\$ -	
SUBTOTAL SUBSCRIPTIONS - MTDC	\$ -	
Services	TOTAL	
	\$ -	
SUBTOTAL SERVICES	\$ -	
SUBTOTAL SERVICES - MTDC	\$ -	
SUBTOTAL - EQUIPMENT, SUPPLIES & SERVICES	\$ 5,962.00	
SUBTOTAL - ESS - MTDC	\$ 5,962.00	

Travel [TR]	-		
	Trip 1		
Totals only. Describe purpose and per person costs in detail in Budget Narrative	Kyiv- Pallman(collaborative work in US laboratories)	TOTAL	Item Applied to MTDC (Yes/No)
International Transportation/Airfare	\$ 1,500.00	\$ 1,500.00	Yes
International Lodging/Per Diem	\$ 100.00	\$ 100.00	Yes
Visa Fees	\$ 50.00	\$ 50.00	Yes
Medical Insurance	\$ 50.00	\$ 50.00	yes
Other Travel Expenses	\$ 700.00	\$ 700.00	yes
SUBTOTAL TRAVEL	\$ 5,100.00	\$ 2,400.00	
SUBTOTAL TRAVEL - MTDC		\$ 2,400.00	

MODIFI	ED TOTAL DIRECT COST (MTDC)	\$18,182
ΤΟΤΑ	L DIRECT COSTS (IFS+ESS+TR)	\$18,182

Indirect Costs [IDC]		
Institution	IDC Rate (% of MTDC)	Total
Plant Breeding and Genetics Institute – National Center of Seed and Cultivar Investigation	10%	\$ 1,818
	SUBTOTAL IDCs	\$ 1,818

TOTAL AWARD BUDGET (Direct + IDCs)

\$20,000

BASIC GRANT AGREEMENT

- 1. <u>Name.</u> "CRDF Global" is the legally registered tradename of the U.S. Civilian Research & Development Foundation.
- 2. <u>Relationship.</u> The Parties are separate organizations operating independently in connection with the Agreement. Neither Party has the authority to create obligations on behalf of the other. Each shall make this fact clear to all third parties with which it deals.
- 3. <u>Agreement Period.</u> Unless otherwise specified in the Agreement Cover Sheet, the Agreement Period commences upon date of execution of the Agreement by CRDF Global and terminates upon expiration of the Duration noted.

The Grantee may incur pre-award costs up to ninety (90) calendar days prior to Agreement execution with the prior approval of the Grant Officer. All pre-award costs are incurred at the Grantee's risk.

- 4. <u>Program Description.</u> The purpose of the Agreement is to support the activities described in Attachment A: Grant Description (hereafter referred to as "Project"). The Grantee's proposal is herein incorporated by reference. Grantee agrees to use all Grant support (including both funds and in-kind and other support and the Grantee Contribution) only for such activities.
- 5. <u>Project Personnel.</u> The following Principal Investigator(s) and/or other staff ("Project Personnel") are deemed essential to successful implementation of the activities specified in the Project: *Reducing impact of pathogens on yield: development of diagnostics for early stages of plant diseases*

Mishchenko, Lidiya Trohymivna	Principal Investigator
Molodchenkova, Olga Olegovna	Co - Principal Investigator
Ryshchakova, Olga Vasilievna	Researcher
Bezkrovnaya, Lidiya Yakovlevna	Researcher
Motsnyi, Ivan Ivanovich	Researcher
Fanin, Yaroslav Sergeyovich	Graduate Student

These individuals may not be replaced without prior written approval of CRDF Global.

The Principal Investigator is responsible for overseeing the technical work to be performed under the Project; for providing technical leadership; for preparing and submitting payment requests and required reports in accordance with CRDF Global guidelines and the policies of his/her respective institution; for ensuring that activities are coordinated with his institution, Project Personnel, and Collaborator(s); and for managing the Project in compliance with terms of this Agreement.

Principal Investigators and other Project Personnel are subject to approval prior to replacement. Departure of one or more Project Personnel, or his/her/their repeated or extended absence from the Project, may be cause for termination of the Agreement by CRDF Global.

Unless otherwise specified herein, Project Personnel are authorized to receive and distribute funds provided under this Agreement in order to facilitate the Project. Funds provided directly to Project Personnel will be credited against the Budget and are subject to all terms of this Agreement.

- 6. <u>Authority of CRDF Global Grant Officer</u>. The assigned Grant Officer maintains the sole authority to interpret, modify or amend any provision of this Agreement. All financial, administrative and contractual issues should be addressed to the Grant Officer. CRDF Global reserves the right to assign a new Grant Officer at any time over the course of the award through written notification to Grantee. The Program Officer is hereby delegated the authority to provide programmatic and technical guidance to Grantee.
- <u>Reports.</u> Grantee shall be required to submit technical and financial reports in a format to be provided by CRDF Global. Reports shall be submitted electronically to the attention of the Grant Officer and Program Officer. Grantee shall submit interim progress reports every six months from the effective date of the award, unless CRDF Global Grant Agreement July 2019 Page 7 of 23

otherwise specified. Grantee shall submit a final technical and financial report with 30 days of the expiration of the award.

Apart from the aforementioned reports, the Grantee shall provide any other reports as may be required by the Sponsor to detail project progress and results.

8. <u>Records, Audit and Access</u>. Financial and other records pertinent to this Agreement, including records of the Grantee and Third Party Contributions, shall be retained for a period of not less than three (3) years from the expiration date of this Agreement. Timely, unrestricted access to records shall be provided to CRDF Global, its representatives and Funders in order to make conduct limited-scope (agreed-upon procedures) audits, examinations, excerpts, transcripts and copies of such documents. This right also includes timely and reasonable access to Grantee's facilities where Agreement-related activities are performed and access to project personnel. CRDF Global reserves the right to issue management decisions in response to any resulting finding(s), to require Grantee to adjust its records in accordance with such decisions, and to take such other measures as it may deem necessary, in its sole discretion, as a result of such audits and audit findings.

The rights of access in this paragraph are not limited to the required retention period, but must last as long as records are retained.

Non-Federal entities that expend \$750,000.00 or more in a year during the non-Federal entity's fiscal year in Federal awards must have a single or program-specific audit conducted for that year in accordance with the provisions of 2 CFR 200.

- 9. <u>Monitoring and Evaluation</u>. CRDF Global will appropriately monitor and evaluate ("M&E") the financial and programmatic progress of Agreement activities. Grantee agrees to cooperate with all reasonable requests for assistance in connection with such M&E, including but not limited to facilitating site visits, closely tracking the performance and impact of Program activities and maintaining and providing records or other information pertinent to such activities. Grantee also agrees to prepare and submit required reports (if any) in a timely manner
- 10. <u>Liability</u>. Grantee agrees and shall require individual Project Personnel to agree that CRDF Global and its Funders shall have no liability to the Grantee, Project Personnel or any other entity or person for any claims arising out of, or related to, the performance of this Agreement or the representations or warranties made by the Grantee and Project Personnel herein except if, and to the extent, due to the negligent, willful or intentional misconduct of CRDF Global, its officers, employees or agents. In addition, except as prohibited by applicable law, all parties to this Agreement assume their own respective liability that may be incurred, including attorney's fees, in defending any action as a result of performance under this Agreement to the extent such liability is a result of the party's negligent, willful or intentional misconduct. The Grantee is advised to take such steps as may be deemed necessary to insure or protect themselves, their employees and property.
- 11. <u>Termination</u>. At any time during the Agreement Period CRDF Global may take any one or more of the following actions: [a] unilaterally terminate the Agreement for convenience with fifteen days' notice [b] unilaterally terminate the Agreement due to Grantee's material breach or noncompliance with the terms and conditions of the Agreement, Grantee insolvency, or upon the direction of any cognizant government official or requirement of applicable law; [c] terminate by mutual agreement of the Parties; or [d] terminate at Grantee's request. Termination shall be effective on the date stated in a written notice to Grantee. The notice will identify the type of action taken and instruct Grantee to cease incurring costs for Project activities, subject to any exceptions stated. Unilateral notices of termination (except for material breach/noncompliance by Grantee, government direction or requirement of law, in which cases CRDF Global shall have no further liability) will ask Grantee promptly to submit a claim for reimbursement of eligible costs incurred before the termination effective date.
- 12. <u>Force Majeure</u>. No party shall be liable for any failure to perform its obligations under this Agreement, if such failure results from any Acts of God, Acts of War, riot, civil unrest, flood, earthquake or other similar cause beyond such party's reasonable control (including any mechanical, electronic or communications failure, but excluding failure caused by a party's financial condition or negligence). A party experiencing a Force Majeure circumstance shall notify the other party(ies), in writing, as soon as possible describing the situation and its impact on the conduct of the Project. The term of this Agreement may be automatically extended by a period

CRDF Global Grant Agreement

equivalent to the period of the force majeure. Should the force majeure situation make it impractical to continue with the execution of the Project, this Agreement may be terminated in accordance with the provisions of this Agreement.

- 13. <u>Non-Waiver</u>. Failure of either or both Parties to enforce any Agreement provision(s) shall not be deemed a waiver or Amendment of the Agreement or a waiver of any prior or subsequent breach.
- 14. <u>Resolution of Disputes</u>. The Parties will exert their best efforts to consult and resolve all issues in connection with the Agreement amicably, equitably and in a mutually satisfactorily manner. Issues that cannot be resolved by communications between the contact persons specified on the Cover Sheet will be reviewed by each Party's senior management. Any remaining issues may be resolved by any agreed non-judicial procedure, absent agreement on which the sole recourse of either Party shall be the courts in the Commonwealth of Virginia, USA. Claims may not include losses, damages or other relief based on harm that could have been avoided or mitigated by reasonable actions of the claiming Party or any exemplary, consequential or punitive damages, however described.
- 15. <u>Governing Law.</u> This Agreement, its making and performance, and the surrounding facts and circumstances shall be interpreted in accordance with the laws in effect in the Commonwealth of Virginia, USA, without effect to its conflict-of-law rules.
- 16. <u>Compliance with Applicable Laws.</u> Grantee agrees to observe and conform to, in all material respects, all laws, rules, regulations, codes, orders and requirements of governmental authorities relating to this Agreement and certifies that it is in compliance with and will comply in the course of the period of performance with other generally applicable requirements, including, but not limited to, those relating to corporate operations, taxation, employment and the environment.

The Grantee further understands and certifies that:

- a) Neither it nor any individual Project Personnel are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this Agreement by any U.S. Government department or agency. Grantee is responsible for notifying CRDF Global immediately in writing if it or any individual Project Personnel become debarred, suspended, declared ineligible or voluntarily excluded from activities to subject to debarment or suspension or proposed for debarment.
- b) This Agreement is subject to the provisions of Title VI of the Civil Rights Act of 1964 [42 U.S.C. § 2000d], Title IX of the Education Amendments of 1972 [20 USC §§ 1681 et seq.], the Rehabilitation Act of 1973 [29 U.S.C. § 794], the Age Discrimination Act of 1975 [42 U.S.C. §§ 6101 et seq], and all regulations and policies issued pursuant to these statutes. Specifically, in accordance with these statutes, regulations, and policies, no person on the basis of race, color, national origin, sex, disability, or age shall be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under this Agreement.
- c) That no Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan or cooperative agreement. The Grantee is responsible for ensuring that any lower tier covered transaction includes a term or condition requiring compliance with this certification.
- d) As a material condition of receiving the Agreement, Grantee accepts the obligation to take all reasonable steps to prevent financing or any other form of material support being provided to terrorists and individuals and entities that provide support or services to, are owned or controlled by, act for or on behalf of, or are otherwise associated with terrorists. With prejudice to the generality of the foregoing, Grantee agrees to ensure that it does not engage in any transaction with or otherwise provide any financing or other material support to an individual or entity on the Specially Designated National (SDN) list issued by the Office of Foreign Assets Control of the US Treasury Department (http://www.treas.gov/offices/enforcement/ofac/sdn). Grantee will also require all subgrantees, contractors and others with whom it deals under the Project to comply with this provision.

- e) It is subject to export regulations of its home country regarding export of certain technical data. No party shall export, either directly or indirectly, its own or any information or data received from any other Party of the direct product thereof to any country in contravention of such export regulations if such would violate the laws of any of the home countries of the Parties. When applicable, the Grantee acknowledges that it has the responsibility to obtain export licenses, or other export authority as may be required, with respect to activities undertaken in connection with this Agreement.
- f) It will comply with the Leahy Law and Amendments (https://www.state.gov/j/drl/rls/fs/2018/279141.htm) pursuant to Section 620M of the Foreign Assistance Act of 1961, including providing recipient information for vetting purposes. Furthermore, the Grantee may not negotiate or execute any subaward or subcontract with any security force without written approval from CRDF Global.

Grantee shall cooperate with CRDF Global in supplying any additional information or in complying with any laws, rules, regulations, or procedures which might be required by any governmental authority in order for CRDF Global to comply with and establish the fact that it has observed all requirements of all laws, rules and regulations with respect to this Agreement.

17. <u>Foreign Taxes and Related Considerations.</u> Funds provided under this Agreement may not be used to pay any customs, duties, taxes, fees or other such levies and costs incurred within the territory of the Grantee's country. Grantee shall inform CRDF Global immediately, in writing, of any tax or duty imposed on funds or materials provided by CRDF Global under this Agreement. Grantee shall comply with all applicable local tax regulations and reporting requirements, and Grantee may choose to seek advice from appropriate tax authorities or other professionals to ensure their compliance.

At CRDF Global's request, Grantee shall submit documentation to obtain additional certification of the Project's tax-exempt status in the country (or countries) where the project is performed. Specific instructions on requirements will be provided by CRDF Global. Failure to submit the required documentation in a timely manner as requested by CRDF Global may result in delays or suspension of payments.

- 18. <u>Integrity and Ethics.</u> At all times during the Agreement Period, both in expending Grant funds as well as in its other activities, Grantee shall adhere to the highest standards of integrity and ethics. Without prejudice to the generality of the foregoing, Grantee shall ensure that it has not provided or offered, and will not provide or offer, any corrupt, prohibited, unethical or even unseemly payment or other benefit directly or indirectly to CRDF Global, any government official(s), or any agent or representative of either of the foregoing.
- 19. <u>Conflicts of Interest.</u> All Grantees shall adhere to the highest ethical standards in all matters related to this Agreement, and shall assure that the Project Personnel adhere to those standards. For purposes of this Article, "Conflict of Interest" means a family or other personal relationship, a business or financial interest, or any other relationship, interest or activity that: a) impairs (or might impair) his/her objectivity in performing his/her obligations under this Agreement; b) makes him/her unable to render impartial assistance or advice under this Agreement; or c) gives him/her an unfair competitive advantage.

"Interest" means a relationship of any kind from which a person or organization derives (or might derive) pecuniary or in-kind benefits. No Grantee or Project Personnel may participate in any decision involving the obligation of Grant funds or the use or disposition of Grant funds if he/she knows, or reasonably should know, that such participation involves an actual or potential Conflict of Interest, or the appearance of such a Conflict of Interest. To implement this requirement the Grantee will:

- a) Disclose promptly to CRDF Global any close family relationship or interest that may constitute or create a Conflict of Interest or the appearance of a Conflict of Interest;
- b) Refrain from participating in, and from using his/her personal influence in connection with, decisions where such participation may involve a Conflict of Interest or the appearance of a Conflict of Interest except:
 - i. To provide information when requested, or
 - ii. To provide information known to him/her indicating that a proposed or existing transaction could be contrary to this policy.

- c) Refrain from dealing on behalf of CRDF Global with organizations or persons on transactions involving the obligation of Project funds or the use or disposition of Project Resources except after full disclosure and with the express written authorization of CRDF Global Grant Officer.
- d) Assure that Project Personnel comply with the requirements of this Article.

The Grantee will monitor its relationships and interests, and those of the Project Personnel, on an ongoing basis and will report any relationships or interests that might violate the provisions of this Article.

- 20. <u>Whistleblower Policy</u>. It is the policy of CRDF Global that grantees, vendors and contractors are encouraged and expected to report possible violations of laws, rules and regulations, as well as fraudulent or dishonest use or misuse of CRDF Global resources or property, violations of CRDF Global's conflict of interest policy and other serious misconduct. Reports may be made directly to CRDF Global management (who can be contacted via the main CRDF Global website <u>www.crdfglobal.org</u> or via the Global Compliance hotline available at <u>https://crdfglobal.alertline.com/gcs/welcome?locale=en</u>. All information will be treated confidentially and all complaints will be investigated by CRDF Global management and regularly reported to the Audit Committee of the Board of Directors. CRDF Global will not retaliate, nor will CRDF Global tolerate retaliation by any of its employees, against any grantee, vendor or contractor who makes a good faith report pursuant to this policy; even if an investigation shows that there has not been a violation.
- 21. <u>Confidential Information</u>. Confidential information, as used in this Agreement, means: 1) information or data of a personal nature about an individual or 2) information or data submitted by or pertaining to the Grantee, Secondary Collaborators, subcontractors, subawardees or CRDF Global. Information may be further identified as "business-confidential" if (1) a person having the information may derive an economic benefit from it or obtain a competitive advantage over those who do not have it, (2) the information is not generally known or publicly available from other sources, and (3) the owner of the information has not previously made it available without imposing in a timely manner an obligation to keep it confidential. In the event that information identified in a timely fashion as confidential or business-confidential is furnished or created under the award, Grantee and Project Personnel shall protect such information in accordance with applicable laws, regulations, and administrative or internal practice.

All aspects of this Agreement, except its financial aspects and information specifically designated as confidential in accordance with the provisions set forth in this Agreement, are considered accessible to the public. Confidential information, as defined in (1) and (2) above, shall not be disclosed without the prior written consent of the Grantee, Project Personnel, or CRDF Global. Whenever the Grantee is uncertain with regard to the proper handling of material under the award, or if the material in question is confidential information subject to this Agreement, Grantee shall obtain a written determination from the Grant Officer prior to any release, disclosure, dissemination, or publication. In addition to the types of confidential information described above, information which might require special consideration with regard to the timing of its disclosure may derive from studies or research, during which public disclosure of preliminary invalidated findings could create erroneous conclusions which might threaten public health or safety if acted upon.

Written advance notice of at least forty-five (45) days will be provided to the Grant Officer of Grantee's intent to release findings of studies or research, which have the possibility of adverse effects on the public, CRDF Global or the Federal funding agency. If the Grant Officer does not pose any objections in writing within the forty-five (45) day period, Grantee may proceed with disclosure.

CRDF Global reserves the right at any time, or from time to time, during the Agreement Period to designate certain information to be used, generated or compiled pursuant to Agreement activities as "confidential information." In the event that this right is exercised, Grantee agrees to comply with any written instructions that CRDF Global may provide with respect to the handling or retention of such information.

22. <u>Publications.</u> Unless stated otherwise in the Standard Provisions or Special Conditions & Exceptions of this Agreement, this Article governs the publication of any material based on or developed under the Project.

All publications must contain the following acknowledgment:

"This publication is based on work supported by a grant from the U.S. Civilian Research & Development Foundation (CRDF Global). Any opinions, findings and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of CRDF Global."

Copies of publications based on or developed under this Agreement shall be provided to CRDF Global or its authorized representatives upon request. The use of CRDF Global's name or logo outside of the parameters discussed above requires advanced written approval from CRDF Global.

BASIC GRANT AGREEMENT GRANT AWARDS OVER \$10,000

- 1. <u>Approvals</u>. All Agreement approvals must be in writing and requested by Grantee from CRDF Global sufficiently before the desired action to permit due consideration, consultation and decision. If it is not possible to obtain prior written approval within such time frame, CRDF Global may ratify the action after the fact, but is not obligated to do so. Grantee understands that approval requests may not always be granted.
- 2. <u>Amendments</u>. The Agreement may only be modified by a written amendment signed by both Parties.
- 3. <u>Use of Funds</u>. The use of funds authorized under this Agreement shall be commenced with reasonable promptness. If, in the sole opinion of CRDF Global, there shall not have been a bona fide commencement of the use of such funds within a reasonable time frame following the commencement of the Agreement Period, CRDF Global reserves the right to rescind unilaterally all or any of the Agreement.
- 4. <u>Financial Management System.</u> Recognizing the importance of properly managing Grant funds, the Grantee agrees to maintain a financial management system that will enable it to comply with all applicable Agreement requirements, including, but not limited to, the following minimum standards:
 - a) Provides accurate, current and complete financial information about Agreement-funded activities.
 - b) Maintains records that adequately identify Grant funds and the purposes for which they are used; supports accounting records with source documentation such as cancelled checks, paid bills, payrolls, and time and attendance records.
 - c) Applies internal controls that yield effective control over and accountability for all cash, property and other assets under the Agreement, safeguards such assets, and ensures that the assets are used only for authorized purposes.
 - d) Enables Grantee to compare actual expenditures with the Budget.
 - e) Screens out costs that are not eligible for reimbursement under the Agreement.
 - f) Includes procedures to ensure that invoices and requests for Grant support are issued only when the funds/support are actually needed for Project purposes.
 - g) Enables financial information such as expenditures in comparison to Budget figures to be related to performance data.

Grantee agrees that CRDF Global or its representatives may review Grantee's financial management system at any time to determine whether it complies with the above requirements.

- 5. <u>Closeout</u>. To facilitate timely closeout of the Agreement, Grantee agrees to perform all of its Agreement obligations in a timely manner and to take all necessary and appropriate steps to assist CRDF Global in the closeout process. Closeout shall, in addition to such other steps as CRDF Global may reasonably request, follow standard CRDF Global procedures which include the following Grantee actions: [a] liquidation of unliquidated obligations, [b] submission of a Final Invoice, [c] refund of unobligated balances, [d] accounting for and if instructed by CRDF Global disposing of goods and other items procured with Grant support; and [e] execution of an acceptable release. Upon Grantee's successful completion of all its obligations under the Agreement, including closeout, CRDF Global will make final payment. Grantee agrees to complete all required closeout actions within 30 days after the Expiration Date unless an extension is granted by CRDF Global.
- 6. <u>Suspension</u>. At any time during the Agreement Period, CRDF Global may suspend the Agreement for any reason for up to 60 days, or longer if deemed necessary. Suspension may be in whole or in part and shall be effective on the date stated in a written notice to Grantee. The notice will identify the type of action taken and instruct Grantee to cease incurring costs for Project activities, subject to any exceptions stated.
- 7. <u>Notification of Certain Events.</u> Grantee shall notify CRDF Global, in writing, of the occurrence of any of the following events:
 - a) Any significant change in the methodology or procedures being used in the Project;
 - b) Any significant or major findings, breakthroughs, or events of unusual interest;

- c) Any problems, delays or adverse conditions that will materially affect the Project, its objectives or time schedules and actions being taken to address them;
- d) Any changes in key personnel or their status on the Project; and
- e) Any change in a Principal Investigator's contact information;
- f) Any change in or absence of a Project Personnel for a period longer than thirty (30) days;
- g) Any change in key personnel's level of effort devoted to the Project;
- h) Any significant change in the Project objectives or scope;
- i) Any reallocation between budget categories not previously approved that is equal to or exceeds \$500.00.

All changes in key personnel, budget reallocation requests, and/or changes in Project objectives or scope are subject to CRDF Global approval. Unless otherwise approved by CRDF Global, all notices in connection with the Agreement shall be made in writing to the CRDF Global-designated representatives specified on the Cover Sheet.

- 8. <u>Certifications</u>. The Grantee understands and certifies that:
 - a) It possesses the legal authority to enter into this Agreement, that a resolution, motion or similar action has been duly adopted or passed as an official act of its governing body, authorizing the acceptance of this award including all understandings and assurances contained therein directing and authorizing the person identified as the official representative of the Grantee to act in connection with the Agreement and to provide such additional information as may be requested.
 - b) During the Agreement Period, Grantee agrees not to engage in severe forms of human trafficking, procure a commercial sex act, or use forced labor in performance of the Agreement. Grantee further agrees to ensure that its employees and subgrantees observe the same requirement, and to disclose any information or allegations of violations that come to its attention; failure to comply with this requirements may result in unilateral termination of the Agreement by CRDF Global without penalty or further payment.
- 9. <u>No Third-Party Beneficiary</u>. Except as specifically set forth in this Agreement, this Agreement is not intended to create and does not create any rights in or benefits to any third party.
- 10. <u>Successors and Assigns</u>. This Agreement shall inure to the benefit of and be binding on the Parties' respective heirs, executors, administrators, successors and approved assigns.
- 11. <u>Assignment and Subagreements.</u> Grantee may not assign, subcontract, grant, subgrant or otherwise transfer any rights (including, but not limited to, claims and rights to receive payment) or obligations under the Agreement to any other person or entity without CRDF Global approval.
- 12. <u>Severability</u> Any Agreement provision(s) determined by a court or other competent authority to contravene applicable law or mandatory public policy will be rendered void or unenforceable only to the extent of such contravention; remaining provisions shall continue in full force and effect and be construed to implement the Parties' intent to the maximum extent practicable.
- 13. <u>Issuance in Multiple Languages</u>. For explanatory purposes or for the sake of clarification, this Agreement and associated documents may be translated into one or more languages other than English. In the event of the existence of such translations, the English-language version shall serve as the definitive version determining the interpretation of any provision contained herein.

PAYMENT TERMS AND CONDITIONS COST-REIMBURSABLE

- <u>Budget.</u> Grantee agrees to comply strictly with the Budget set forth in Attachment B (hereafter referred to as "Budget"). The Budget includes line items for all types of Grant support, whether expenditures will be by CRDF Global or Grantee or third party. Costs of Grant support not expressly specified in the Budget, or in excess of line items therein, are not eligible costs and may not be charged to the Grant or included in the Grantee Contribution unless subsequently approved in writing by CRDF Global. CRDF Global's aggregate liability arising out of or relating to the Agreement, regardless of the type(s) and mix of Grant support involved, may not under any circumstances exceed the Total Ceiling. Grantee is solely responsible for any overruns.
- <u>Eligible Costs.</u> CRDF Global Grant support may include any one or more of the following types of assistance, without limitation, as set forth in the Budget or as otherwise subsequently agreed: [a] individual support payments paid directly to Project Personnel, [b] equipment, materials, supplies and/or services purchased on behalf of the grantee, [c] travel-related direct payments to individual Project Personnel or to vendors on their behalf; and [d] direct transfers of funds to institutional accounts for project-related expenses.

Grantee may use Grant funds and any Contributions only for Grantee's verifiable, reasonable, allocable and allowable direct costs necessary for performance of the activities specified in the Project. All such costs must comply with the terms and conditions of the Agreement and must be incurred and expended in the Grant Period. In incurring costs, as in other matters relating to implementation, Grantee is expected to exercise prudent management and to make sound administrative judgments under the circumstances prevailing at the time a decision is made. Documentation supporting expenditures and other actions in implementing the Agreement must be made in advance of the action, be consistent with the Grantee's established policies and procedures, comply with the terms of this Agreement and current CRDF Global policies and procedures, and reflect appropriate approvals within the organization.

3. <u>Payments.</u> Grantee will be reimbursed for Eligible Costs incurred based on the Grantee's submission of an invoice or other payment request format provided by CRDF Global. All requests for payment are to be submitted directly to the Grant Officer. Advance payments may be authorized by the Grant Officer in accordance with the Grantee's actual, immediate needs for funding to carry out the purpose of the Project. When advance payments are authorized, the Grantee agrees to minimize the time elapsing between the Grantee's receipt of funds and the outlays of the funds for Project purposes.

On Agreement termination, the Grantee will refund the balance of Grant funds not already expended or irrevocably obligated.

- 4. <u>Method of Payment.</u> CRDF Global reserves the right, in its sole discretion, to determine the method of payment, payee, and to decline any request received that is inconsistent with the terms of this Agreement or in violation of CRDF Global procedures or program guidelines. To the extent possible CRDF Global attempts to make payment directly to Project Personnel and the individuals, organizations and vendors that support the Agreement; any such payments are credited against the Budget and are subject to the terms of this Agreement. CRDF Global will make best efforts to minimize transfer fees applied by financial institutions involved in the funds transfer process. However, CRDF Global is not liable for transfer fees applied by intermediary financial institutions; such costs must be borne by Grantee.
- 5. <u>Overpayments and Offsets.</u> If Grantee becomes aware of an overpayment, an erroneous payment, or a duplicate payment, Grantee shall immediately notify CRDF Global in writing and request instructions for handling the matter. CRDF Global may deduct from any payment all or part of any amount, whether in connection with the Agreement or any other agreement, owed to it by Grantee.
- 6. <u>Individual Financial Support (IFS)</u>. Payments to individual Project Personnel will be made, to the extent possible, directly to bank accounts designated by CRDF Global for the benefit of the individual in accordance with current CRDF Global procedures.

- 7. <u>Timekeeping.</u> Eligible individual financial support costs will be based on actual level of effort of Project Personnel and must be supported by individual timesheets subject to the following provisions:
 - a) Individual timesheets, signed by both the requesting Project Personnel and the responsible Principal Investigator. Timesheets are to be maintained daily and submitted to the Principal Investigator on a monthly basis for review and approval.
 - b) Project Personnel must use a CRDF Global-provided timesheet template, unless an alternative template has been approved, in writing, by the CRDF Global Grant Officer. Timesheets will be completed based on actual time worked on CRDF Global-funded activities, with working hours being recorded on the provided timesheet template.
 - c) Project Personnel engaged in more than one concurrent CRDF Global project must complete one single timesheet recording hours spent for each project separately.
 - d) The Principal Investigator is responsible for monitoring and documenting Project Personnel's compliance with timekeeping and reporting requirements; ensuring that Project Personnel are trained and informed on the timekeeping and reporting requirements; ensuring the timely collection of timesheets from all Project Personnel on the project each month; reviewing of timesheets for accuracy; certifying the accuracy of the timesheets collected; ensuring that payment requests are submitted to CRDF Global in a timely manner; and maintaining timesheet records for the Project.
- 8. <u>Goods and Services</u>. Goods and services purchased by the Grantee with Agreement funds must be procured competitively to the extent practicable, at reasonable prices, from responsible sources selected fairly in a manner unimpaired by conflicts of interest or other malpractices. Receipt and proper use for activities within the scope of Project must be fully documented. Grantee may hold title to goods that it purchases pursuant to this Article or that are donated by CRDF Global, but it shall use them only for the purposes of the Project unless otherwise approved. All orders for goods and services that exceed \$10,000 are subject to competitive selection requirements. Documentation of vendor selection must be maintained by the Grantee and submitted to the Grant Officer on request.
- 9. <u>Equipment</u>. Goods and services over \$1,000 (or local currency equivalent) per unit acquisition cost, and with a usable life of longer than one year shall be defined as Equipment. Purchase of Equipment is subject to the following provisions:
 - a) No Equipment other than items identified in the Budget may be acquired under this Agreement without the express written approval of the Grant Officer.
 - b) All Equipment must be clearly and prominently marked as provided or financed by CRDF Global.
 - c) All equipment and other property acquired under this Agreement must remain available to and be used for the Project, and may not be sold, leased, mortgaged or otherwise transferred, or used for any non-Project purpose, be located and maintained at the premises of the Grantee or an authorized Collaborator, as appropriate, and remain accessible for viewing, examination or audit unless CRDF Global agrees otherwise in writing.
 - d) Unless otherwise stipulated Equipment and other physical property received by the Grantee or Collaborator under this Agreement is supplied in the capacity of technical assistance and is transferred to the Grantee or Collaborator as authorized by CRDF Global.
 - e) Title to Equipment and other property acquired under this Agreement will vest in the Grantee or Collaborator, as appropriate, unless otherwise directed by CRDF Global in writing.
 - f) Use of any Equipment or other property acquired under this Agreement by military end-users or for military purposes is expressly prohibited.
 - g) The Grantee shall ensure that all Equipment and other property provided under this Agreement is maintained in a manner consistent with its specifications and reasonable care, security and maintenance.
 - h) In the event this Agreement is terminated for cause or the Grantee is in material breach thereof, CRDF Global may, at its sole discretion, require that any Equipment and property acquired under this Agreement be returned to CRDF Global or transferred to a third party. The shipping costs related to the return or transfer of the Equipment and property will be borne by CRDF Global.
 - i) Within thirty days of receipt of Equipment, Grantee will prepare and return an itemized receiving report, signed by an authorized representative, confirming receipt in apparent good order and working condition

and registration of the Equipment on the Grantee's balance sheet. The report will be in a form to be provided by CRDF Global.

- j) Items over \$5,000 or local currency equivalent per unit acquisition cost shall be reported to CRDF Global and disposition instructions requested when the items are no longer needed for such purposes.
- 10. <u>Travel</u>. All travel undertaken by Grantee must be authorized in advance by the Grant Officer. Travel expenses will be paid directly by CRDF Global or reimbursed to the Grantee, as applicable. All travel is subject to the following provisions:
 - a) Travel expense claims shall be reimbursed up to the maximum amounts allowable under the Federal Travel Regulations in effect at the time of travel. The regulations provide for reimbursement of actual lodging cost plus a fixed allowance for meals and incidental expenses, up to the applicable maximum amounts prescribed.
 - b) All air transportation purchased must be at the "lowest logical airfare" subject to the Fly America Act. "Lowest logical airfare" is defined as the lowest cost alternative that accommodates business commitments at the place of departure and travel destination. Premium-, Business-class and first-class tickets are not allowable expenses under this Agreement.
 - c) Receipts are required for lodging and any incidental expenses. Photocopies of receipts are acceptable provided originals are made available upon request for inspection and/or audit. Boarding passes may be required for substantiation of airline travel and are to be submitted on request.
 - d) Brief trip reports detailing the purpose and outcome(s) of travel undertaken must be submitted by individual travelers no later than 30-days following return.
 - e) If domestic and/or international travel is required under this contract, the Grantee certifies that any individual traveling under this agreement is medically fit to engage in the travel. CRDF Global reserves the right if required by funder, insurance requirements, or for other reason, to require that the Grantee provide certification from a licensed medical professional certifying fitness to travel prior to approval of any given travel.

CRDF Global provides Travelers on international business trips with emergency medical insurance. This insurance does not cover any personal travel that may take place within an overall business trip itinerary.

- 11. <u>Fly America Act</u>. The following provisions shall govern the air transportation of persons and property utilizing funds provided under this Agreement.
 - a) Any air transportation to, from, between, or within a country other than the U.S. of persons or property, the expense of which will be assisted by CRDF Global funding, must be performed by or under a code-sharing arrangement with a U.S.-flag carrier if service provided by such a carrier is available. Tickets (or documentation for electronic tickets) must identify the U.S. flag air carrier's designator code and flight number.
 - b) For the purposes of this requirement, U.S. flag air carrier service is considered available even though:
 - i. Comparable or a different kind of service can be provided at less cost by a foreign air carrier;
 - ii. Foreign air carrier service is preferred by or is more convenient for the agency of traveler; or
 - iii. Service by a foreign air carrier can be paid for in excess foreign currency.
 - c) The following rules apply unless their application would result in the first or last leg of travel from or to the U.S. being performed by a foreign-flag carrier.
 - i. A U.S.-flag air carrier shall be used to destination or, in the absence of direct or through service, to the farthest interchange point on a usually traveled route
 - ii. If a U.S.-flag air carrier does not serve an origin or interchange point, a foreign-flag air carrier shall be used only to the nearest interchange point on a usually traveled route to connect with a U.S. flag air carrier.
 - d) If a U.S.-flag carrier involuntarily reroutes the traveler via a foreign-flag air carrier, the foreign-flag air carrier may be used notwithstanding the availability of U.S.-flag air carrier service.
 - e) Travel to and from the United States: Use of a Foreign-Flag Air Carrier is permissible if:
 - i. The airport abroad is the traveler's origin or destination airport, and use of U.S.-flag air carrier service would extend the time in a travel status by at least 24 hours more than travel by a foreign-flag air carrier; or

- ii. The airport abroad is an interchange point, and use of U.S.-flag air carrier service would increase the number of aircraft changes the traveler must make outside of the U.S. by 2 or more, would require the traveler to wait four hours or more to make connections at that point, or would extend the time in a travel status by at least six hours more than travel by a foreign-flag air carrier.
- f) Travel Between Points Outside the United States: Use of a foreign-flag air carrier is permissible if:
 - i. Travel by foreign air carrier would eliminate two or more aircraft changes en route;
 - ii. Travel by a U.S.-flag air carrier would require a connecting time of four hours or more at an overseas interchange point; or
 - iii. The travel is not part of a trip to or from the United States and the use of a U.S. flag carrier would extend the time in a travel status by at least six hours more than the travel by foreign air carrier.
- g) Short-Distance Travel: For all short-distance travel, regardless of origin and destination, use of a foreign-flag air carrier is permissible if the elapsed travel time on a scheduled flight from origin to destination airport by a foreign-flag air carrier is three hours or less and service by a U.S.-flag carrier would double the travel time.
- h) In the event that individual Project Personnel traveling under this Agreement invokes one of abovereferenced exceptions to the Fly America regulations, he/she must provide a written "CERTIFICATION OF UNAVAILABILITY OF U.S.-FLAG CARRIERS stating: "I [the traveler] hereby certify that the transportation service for personnel (and their personal effects) or property by certified U.S. air carrier was unavailable for the following reason(s): [State appropriate reason(s) as set forth above].
- 12. <u>Institutional Support (IS)</u>. The Grantee is authorized to utilize IS funds to support institutional costs related to project implementation, including the purchase of equipment, supplies and services related to the project. The provision of IS is subject to the following conditions:
 - a) All IS payments are to be paid solely on a reimbursable basis based on actual costs incurred by the Grantee.
 - b) All IS requests must include sufficient documentation to determine allowability and appropriateness of costs incurred, in accordance with Section 2: Eligible Costs.
 - c) Grantees may only receive reimbursement for IS claims that are allowable and properly documented. Any remaining balance in the budget reverts to CRDF Global upon award closeout.
 - d) IS funds may not be used to support any of the following expenses: any governmental, federal or local tax, including social, medical or pension fund contributions; purchase, rent or lease of any vehicle without advance written approval from the Grant Officer; salaries, stipends or IFS; profit or fees for the Grantee organization.

STANDARD PROVISIONS RESEARCH GRANTS

- 1. <u>Research Misconduct.</u> The Grantee shall have in place established policies and procedures for the identification, reporting and investigation of research misconduct. Any potential incidents of research misconduct that, if valid, would cast significant doubt on the validity of the research results resulting under the CRDF Global award, shall be reported promptly, in writing, to CRDF Global.
- 2. <u>Intellectual Property.</u> Unless stated otherwise in the Standard Provisions or Special Conditions & Exceptions of this Agreement, this Article governs the ownership and disposition of Intellectual Property ("IP") conceived or developed in the performance of this Agreement.

For purposes of this Agreement, IP includes, without limitation, the rights relating to:

- a) literary, artistic and scientific works,
- b) inventions in all fields of human endeavor,
- c) scientific discoveries,
- d) industrial designs,
- e) trademarks, service marks, and commercial names and designations,
- f) protection against unfair competition,
- g) and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields.

Grantee will provide CRDF Global with copies of any pre-existing written agreement, and/or a summary of the terms of any pre-existing oral agreement, that may affect the IP conceived or developed in the performance under this Agreement. Intellectual Property rights shall be allocated as follows:

- a) Unless otherwise agreed, this Agreement shall not affect IP rights owned by the Grantee, Project Personnel and/or Collaborators/Subgrantees prior to the Effective Date.
- b) All right, title and interest to IP conceived or first developed in the performance of this Agreement shall vest in the Grantee and/or Project Personnel that conceived or first developed it.
- c) All right, title and interest to IP jointly conceived or jointly developed shall be jointly owned by the responsible Grantee and/or Project Personnel.
- d) Each PI/PD shall have a non-exclusive, irrevocable, royalty-free license in all countries to translate, reproduce and publicly distribute scientific and technical journal articles, reports, and books arising under this Agreement. All publicly distributed copies of a copyrighted work prepared under this provision shall indicate the names of the authors of the work unless an author explicitly declines to be named.
- e) The rights of researchers and scientists visiting in furtherance of their education shall be governed by the rules of the host institution. Each visiting researcher and scientist named as an inventor or author shall have the right to national treatment regarding awards, benefits or other compensation, including royalties in accordance with the rules of the host institution.
- f) CRDF retains, on behalf of the US Government and subrecipients of US Government assistance programs, a non-exclusive, irrevocable license to use, modify, reproduce, release, perform, display, or disclose the copyrighted work.
- g) CRDF Global makes no claim to any IP conceived or developed in the performance of this Agreement.

The Grantee shall ensure that IP conceived or first developed in performance of this Agreement is promptly and effectively protected. Disputes concerning IP conceived or first developed in performance of this Agreement should be resolved through discussions between the concerned Grantee/Project Personnel and Collaborator. Any dispute not resolved in this manner within a reasonable time will be referred to and resolved by binding arbitration in an arbitral tribunal acceptable to both parties for arbitration by a single arbitrator in accordance with the applicable rules of international law. Each party will bear its own costs, provided, however, that the arbitrator may allocate all or any part of the prevailing party's costs (including, without limitation, reasonable attorneys' fees) to the non-prevailing party, as he/she deems equitable. The award will be final and binding on the parties, and judgment thereon may be entered in any court of competent jurisdiction.

Unless otherwise agreed in writing, Grantee will continue to perform its respective obligations under this Agreement notwithstanding the existence of an IP dispute or the pendency of an arbitration proceeding.

The provisions of this Article shall survive the expiration or earlier termination of this Agreement.

STANDARD PROVISIONS U.S. DEPARTMENT OF STATE

- 1. <u>Agency Terms & Conditions</u>. This Agreement and the activities thereunder are subject to the U.S. Department of State Standard Terms and Conditions for Domestic Federal Assistance Awards. The full text of those Terms and Conditions may be found at the following link: <u>https://www.state.gov/documents/organization/271865.pdf</u>
- 2. <u>Publications.</u> Any publication of any material based on or developed under the Project must contain the following acknowledgment:

"This publication is based on work supported by a grant from the U.S. Civilian Research & Development Foundation (CRDF Global) with funding from the United States Department of State. The opinions, findings and conclusions stated herein are those of the author(s) and do not necessarily reflect those of CRDF Global or the United States Department of State."

Copies of publications based on or developed under this Agreement shall be provided to CRDF Global or its authorized representatives upon request. The use of CRDF Global's name or logo outside of the parameters discussed above require advanced written approval from CRDF Global.

3. <u>Participant Information.</u> CRDF Global requires that the Grantee provide identification documents, such as CVs and government issued photo identification, for any individual involved with the Agreement prior to the individual's involvement in any activity. This requirement extends to all grantees, attendees, participants, trainers, speakers, or any similar individual ("Participants") and to any research, training, workshop, event, or similar activity ("Activity") that occurs under the Agreement. In order to comply with this requirement, Participant information must be received at least 35 days in advance of the Participant's involvement in any Activity supported by the Agreement. Additionally, CRDF Global reserves the right to approve or decline the involvement of any Participant in an Activity supported by the Agreement. Failure to comply with this requirement may be construed as a breach of the Agreement and may result in a reduction in reimbursement for costs and/or Agreement termination.

BANK INFORMATION

Complete the below form in order to receive payment by ACH Credit or International wire. By completing this form, the Grantee confirms the ability to receive Grant Support to the specified account.

Name on Account	
Grantee's Address	
Grantee's Phone Number	
Grantee's Tax ID (US Only)	
Bank Name	
Bank Address, Telephone (Branch Name or Number sufficient)	
Bank Routing Number/ABA (US only)	
Beneficiary's Bank Account Number or IBAN ¹	
Bank SWIFT Number (non-US only) ²	
Currency of Account (USD, EUR, GBP etc.)	
Bank IFSC (India)/Sort(UK)/Branch Code(Kenya)	
Intermediary Bank Information (non-US only)	
Reference Number or Special Notes to use for Transfer Detail Description Line (if applicable)	
If traveling for CRDF Global activities, can funds be accessed remotely via debit card, etc?	

¹ If the bank account has an IBAN, the IBAN MUST be provided. Please check with your bank for more information. ² The SWIFT number is a unique bank identifier. Please check with your bank branch's representative to obtain this information.

Not providing a SWIFT number for your specific bank branch may result in delays in receiving funds.

SPECIAL CONDITIONS & EXCEPTIONS

The Funder authorized pre-award expenses beginning July 1, 2019, that is specified in the Agreement Cover Sheet, notwithstanding the Agreement execution date.