Fiscal Year:	FY 2016	**Task Last Updated:**	FY 10/19/2016
PI Name:	Bell, Suzanne Ph.D.		
Project Title:	A US-Russian Collaborative Proposal for Data Collection in HERA: The Relationship between Composition, Interpersonal Relations, and Team Effectiveness in Space Crews		
Division Name:	Human Research		
Program/Discipline:			
Program/Discipline--Element/Subdiscipline:	HUMAN RESEARCH--Behavior and performance		
Joint Agency Name:		**TechPort:**	No
Human Research Program Elements:	(1) **HFBP**:Human Factors & Behavioral Performance (IRP Rev H)		
Human Research Program Risks:	(1) **Team**:Risk of Performance and Behavioral Health Decrements Due to Inadequate Cooperation, Coordination, Communication, and Psychosocial Adaptation within a Team		
Space Biology Element:	None		
Space Biology Cross-Element Discipline:	None		
Space Biology Special Category:	None		
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Zip Code:	77058	**Congressional District:**	36
Comments:			
Project Type:	GROUND	**Solicitation / Funding Source:**	2015-16 HERO NNJ15ZSA001N-ILSRA. Appendix F: International Life Sciences Research Announcement
Start Date:	08/12/2016	**End Date:**	08/11/2019
No. of Post Docs:		**No. of PhD Degrees:**	
No. of PhD Candidates:		**No. of Master' Degrees:**	
No. of Master's Candidates:		**No. of Bachelor's Degrees:**	
No. of Bachelor's Candidates:		**Monitoring Center:**	NASA JSC
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Flight Program:			
Flight Assignment:	NOTE: Element change to Human Factors & Behavioral Performance; previously Behavioral Health & Performance (Ed., 1/17/17)		
Key Personnel Changes/Previous PI:			
COI Name (Institution):	Gushin, Vadim M.D., Ph.D. (Institute of Bio-Medical Problems RAS) Vinokhodov, Alla Ph.D. (Institute of Bio-Medical Problems RAS) Contractor, Noshir Ph.D. (Northwestern University) DeChurch, Leslie Ph.D. (Georgia Tech Research Corporation)		
Grant/Contract No.:	NNX16AQ48G		
Performance Goal No.:			
Performance Goal Text:			

Task Description:	How crew composition and interpersonal relations affect crew functioning and effectiveness has been and continues to be of interest to both NASA and the Institute of Biomedical Problems (IBMP), whose research informs operations for the Russian Federal Space Agency. Over time, research from these agencies has evolved with different emphases. NASA-sponsored team composition research heavily relies on trait and network theories. It seeks to identify traits and combinations of traits that can be used to compose, train, and manage highly effective crews (Team Gap 8). IBMP-sponsored research mostly has moved away from trait-based approaches toward an idiographic (in-depth, heavily descriptive) approach to researching crew interpersonal relations. We propose a cutting-edge integrative model which details how team member attributes, combinations thereof, and interpersonal perceptions affects the emergence of relational states in isolated and confined environments (ICE). Specifically, we propose to develop and empirically test a process model of interpersonal relationship formation in ICE. As part of our research, we also will examine the validity of the Personal Self-Perception and Attitudes (PSPA), which is a standardized measure utilized by the Russians to assess interpersonal compatibility and relations. We propose a 3-year US-Russian collaborative effort in which we leverage existing data previously collected in the Mars 105 and Mars 500 simulations; collect new data using analog-definition research in the 2017 and 2018 HERA campaigns; and use a novel data analysis approach. Our efforts will result in research products critical to Team Gaps 1, 4, and 8, including an empirically supported model, recommendations for a path forward for international collaboration in research related to team composition and interpersonal relations in ICE, and a summary of validation evidence for the PSPA with recommendations for whether it should be included in NASA's standardized measures for analog environments.
Rationale for HRP Directed Research:	
Research Impact/Earth Benefits:	
Task Progress:	New project for FY2016.
Bibliography Type:	Description: (Last Updated: 02/15/2024)