Fiscal Year:	FY 2009	**Task Last Updated:**	FY 09/01/2009
PI Name:	Sams, Clarence Ph.D.		
Project Title:	Consequences of Long-Term Confinement and Hypobaric Hypoxia on Immunity in the Antarctic Concordia Environment (CHOICE)		
Division Name:	Human Research		
Program/Discipline:	HUMAN RESEARCH		
Program/Discipline--Element/Subdiscipline:	HUMAN RESEARCH--Biomedical countermeasures		
Joint Agency Name:		**TechPort:**	No
Human Research Program Elements:	(1) **HHC**:Human Health Countermeasures		
Human Research Program Risks:	(1) **Immune**:Risk of Adverse Health Event Due to Altered Immune Response		
Space Biology Element:	None		
Space Biology Cross-Element Discipline:	None		
Space Biology Special Category:	None		
PI Email:	clarence.sams-1@nasa.gov	**Fax:**	FY
PI Organization Type:	NASA CENTER	**Phone:**	281-483-7160
Organization Name:	NASA Johnson Space Center		
PI Address 1:	Human Adaptation and Countermeasures Office		
PI Address 2:	2101 NASA Parkway, Mail Code SK		
PI Web Page:			
City:	Houston	**State:**	TX
Zip Code:	77058-3607	**Congressional District:**	22
Comments:			
Project Type:	GROUND	**Solicitation / Funding Source:**	Directed Research
Start Date:	10/01/2008	**End Date:**	09/30/2012
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
Contact Monitor:	Goodwin, Thomas	**Contact Phone:**	
Contact Email:	thomas.j.goodwin@nasa.gov		
Flight Program:			
Flight Assignment:	NOTE: End date is 9/30/2012 per CoI and HRP Master Task List dtd 7/12/2011 (Ed., 8/8/2011)		
Key Personnel Changes/Previous PI:	Alexander Choukèr, Department of Anaesthesiology, Hospital of the Ludwig-Maximilians-University of Munich, Germany, is the European (ESA) PI. Clarence Sams is the U.S. PI.		
COI Name (Institution):	Chouker, Alexander (Co-PI: Hospital of the Ludwig-Maximilians-University, Munich, Germany) Baatout, Sarah (SCK-CEN, Belgium) Campolongo, Patricia (University of Rome “La Sapienza”, Italy) Crucian, Brian (NASA Johnson Space Center) Duchamp, Claude (Université Claude Bernard, Lyon, France) Gunga, Hanns-Christian (University of Berlin, Charité, Germany) Kaufmann, Ines (Ludwig-Maximilians-University of Munich, Germany) Kreth, Simone (Ludwig-Maximilians-University of Munich, Germany) Pierson, Duane (NASA Johnson Space Center) Praun, Siegfried (V&F Medical, Austria) Raccurt, Mireille (Université Claude Bernard, Lyon, France) Schachtner, Thomas (Ludwig-Maximilians-University of Munich, Germany) Schelling, Gustav (Ludwig-Maximilians-University of Munich, Germany) Thiel, Manfred (Ludwig-Maximilians-University of Munich, Germany)		

Grant/Contract No.:	
Performance Goal No.:	
Performance Goal Text:	
Task Description:	The vulnerability of totally isolated wintering groups in Antarctica is a concern alike of those needing major consideration when planning health care and health monitoring during long-term space flights, manned lunar exploration and potential future “extraterrestrial” settlement. The recently published medical statistics of Antarctic wintering-over teams in the last decades and new research reports indicate that the health and the immune system are affected under the conditions of confinement in the pole regions. Beside the consequences of confinement on stress-dependent immune-modulation, hypobaric hypoxia may add to modulate immunity and potentially aggravate immune suppression. Therefore, this protocol seeks to investigate the consequences of long-term confinement AND hypobaric hypoxia using the opportunity of research on the CONCORDIA station. To delineate the consequences of confinement from hypoxia, this study is designed to allow for comparison of results of several earth-bound (e.g. Antarctic Georg Neumayer Station) and space-flight control groups in former and ongoing scientific studies.
Rationale for HRP Directed Research:	
Research Impact/Earth Benefits:	
Task Progress:	New project for FY2009.
Bibliography Type:	Description: (Last Updated: 06/29/2023)