

Fiscal Year:	FY 2004	Task Last Updated:	FY 03/29/2006
PI Name:	Lieberman, Philip Ph.D.		
Project Title:	Speech monitoring of cognitive deficits and stress		
Division Name:	Human Research		
Program/Discipline:	NSBRI Teams		
Program/Discipline--Element/Subdiscipline:	NSBRI Teams--Neurobehavioral and Psychosocial Factors Team		
Joint Agency Name:	TechPort:	No	
Human Research Program Elements:	(1) BHP :Behavioral Health & Performance (archival in 2017)		
Human Research Program Risks:	(1) BMed :Risk of Adverse Cognitive or Behavioral Conditions and Psychiatric Disorders		
Space Biology Element:	None		
Space Biology Cross-Element Discipline:	None		
Space Biology Special Category:	None		
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Zip Code:	02912	Congressional District:	2
Comments:			
Project Type:	GROUND	Solicitation / Funding Source:	2003 Biomedical Research & Countermeasures 03-OBPR-04
Start Date:	07/01/2004	End Date:	06/30/2008
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: NSBRI		
Contact Monitor:	Contact Phone:		
Contact Email:			
Flight Program:			
Flight Assignment:			
Key Personnel Changes/Previous PI:			
COI Name (Institution):			
Grant/Contract No.:	NCC 9-58-NBPF00406		
Performance Goal No.:			
Performance Goal Text:			
Task Description:	<p>The goal of this project is to derive and validate acoustic measures of speech that permit automatic and unobtrusive on-line monitoring of the effects of stress and neurological impairment on astronauts' ability to perform in extended deep space missions. Our project will integrate and validate ongoing NSBRI research projects aimed at systems that monitor astronauts ability to perform using (a) video recognition of facial markers of stress, (b) acoustic measures of stress and impaired cognition and (c) psychometric test procedures that permit the rapid assessment of cognitive ability. The project will establish a synergy between (1) a space-analog study involving climbers ascending Mount Everest, where life-threatening stress and neurologic impairment similar to that which may result from exposure to cosmic rays in deep-space missions occurs, and (2) the findings of laboratory-based studies of task-induced stress.</p>		

Rationale for HRP Directed Research:**Research Impact/Earth Benefits:****Task Progress:** New project for FY2004.**Bibliography Type:** Description: (Last Updated: 02/27/2014)