Fiscal Year:	FY 2019	**Task Last Updated:**	FY 06/10/2019
PI Name:	Vunjak-Novakovic, Gordana Ph.D.		
Project Title:	Organs on a Chip Platform for Assessing Cosmic Radiation Damage		
Division Name:	Human Research		
Program/Discipline:			
Program/Discipline--Element/Subdiscipline:	TRISH--TRISH		
Joint Agency Name:		**TechPort:**	Yes
Human Research Program Elements:	None		
Human Research Program Risks:	None		
Space Biology Element:	None		
Space Biology Cross-Element Discipline:	None		
Space Biology Special Category:	None		
PI Email:	gv2131@columbia.edu	**Fax:**	FY
PI Organization Type:	UNIVERSITY	**Phone:**	212-305-2304
Organization Name:	Columbia University		
PI Address 1:	Department of Biomedical Engineering and Medicine		
PI Address 2:	622 West 168th Street, VC12-234		
PI Web Page:			
City:	New York	**State:**	NY
Zip Code:	10032	**Congressional District:**	13
Comments:			
Project Type:	GROUND	**Solicitation / Funding Source:**	TRISH--Focused Investigations
Start Date:	06/01/2019	**End Date:**	09/30/2020
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:**	TRISH
Contact Monitor:		**Contact Phone:**	
Contact Email:			
Flight Program:			
Flight Assignment:	NOTE: End date changed to 9/30/2020 (originally 5/31/2020) per TRISH (Ed., 6/5/2020)		
Key Personnel Changes/Previous PI:			
COI Name (Institution):			
Grant/Contract No.:	NNX16AO69A-FIP0014		
Performance Goal No.:			
Performance Goal Text:			
Task Description:	Focused Investigation Project This project will implement a novel “organs on a chip” platform to investigate the effects, mechanisms, and protective measures related to cosmic radiation. Human tissues will be bioengineered from induced pluripotent stem cells (iPS cells), matured, physiologically connected by vascular perfusion containing immune cells, and subjected to space radiation and simulated microgravity, separately or simultaneously.		
Rationale for HRP Directed Research:			
Research Impact/Earth Benefits:			

Task Progress:	New project for FY2019.
Bibliography Type:	Description: (Last Updated: 10/31/2023)