Task Book Report Generated on: 04/25/2024

Project Title: Sensorimotor Predictors of Postlanding Functional Task Performance Human Research Human Research Human Research	Fiscal Year:	FY 2020 Task Last V	U pdated:	FY 04/29/2020	
Division Name: Human Research Program Discipline: Program Discipline- Element/Subdiscipline- Element/Subdiscipline- Element/Subdiscipline- Element/Subdiscipline- Element/Subdiscipline- Joint Agency Name: TechPort: No Human Research Program Elsis: (1) HIC-Human Health Countermeasures Human Research Program Elsis: (1) Sensorimotor/Risk of Altered Sensorimotor/Vestibular Function Impacting Critical Mission Tasks Space Biology Flement: None Space Biology Flement: None Space Biology Flement: None Space Biology Special Category: None PI Email: Sent. invited@nasa.gov Fax: PY PI Organization Type: NASA CENTER Phone: (281) 483-6329 Organization Name: NASA Johnson Space Center PI Address 1: 2101 NASA Park-way PI Address 2: Mail code SD2 PI Web Tage: City: Houston State: TX Zip Code: 77058 Congressional District: 36 Comments: NOTE PL returned to NASA JSC in January 2017. Pl was at Acasse Pacific University from August 2013 - January Zip Code: No. of Post Dose: No. of Phot Dieges: No. of Post Dose: No. of Phot Dieges: No. of Phot Condidates: No. of Master' Degrees: No. of Bachelor's Degrees: No. of Master's Candidates: No. of Master' Degrees: No. of Master's Candidates: No. of Master' Degrees: No. of Master's Candidates: No. of Master' Degrees: No. of Bachelor's Candidates: No. of Master' Degrees: No. of Bachelor's Candidates: No. of Master' Degrees: No. of Master's Candidates: No. of Master' Degrees: No. of Bachelor's Degrees: No. of Master's Candidates: No. of Master's Degrees: No. of Bachelor's Degrees: No. of Master's Candidates: No. of Master's Degrees: No. of Bachelor's Degrees: No. of Bachelor's Degrees: No. of Master's Candidates: No. of Master's Degrees: No. of Master's Candidates: No. of Master's Degrees: No. o	PI Name:	Wood, Scott J. Ph.D.			
Program/Discipline: Program/Discipline- Element/Subdiscipline: Joint Agency Name: TechPort: No Human Research Program Elements: (1) IHIC-Human Health Counternessures Human Research Program Elements: None Space Biology Cross-Element: None Space Biology Cross-Element: None Space Biology Cross-Element: None Space Biology Special Category: None PI Email: senti woodignass boy PI Organization Type: NASA CENTER Organization Type: NASA CENTER PI Organization Name: NASA Johnson Space Center PI Address 1: 210 NASA Parksuy PI Address 2: PI Medicas 2: PI Web Page: City: PI Menuson NOTE: PI returned to NASA JoSC in January 2017. PI was at Azusa Pacific University from August 2013 - January 2017. Project Type: GROUND Solication F F and Date: No. of Phat Degrees: No. of Master's Candidates: No.	Project Title:	Sensorimotor Predictors of Postlanding Functional Task Performance			
Program/Discipline- Elements No No No No No No No N	Division Name:	Human Research			
Elements/Subdiscipline: TechPort: No	Program/Discipline:				
Human Research Program Elements: (1) BIIC-Human Health Countermeasures Human Research Program Risks: (1) Sensorimotor-Risk of Altered Sensorimotor-Vestibular Function Impacting Critical Mission Tasks Space Biology Cross-Element Space Biology Cross-Element Space Biology Special Category: None PI Email: scort_iwond@mass.gov Fax: FY PO organization Type: NASA CENTER Phone: (281)483-6329 Organization Type: NASA CENTER Phone: (281)483-6329 Organization Name: NASA Johnson Space Center PI Address 1: 2101 NASA Parkway PI Address 2: Mail code SD2 PI Web Page: City: Mouston State: TX Zip Code: 77058 Congressional District: 36 Comments: 2017: Pirotro August 2013, PI was at NASA JSC. Comments: 2017: Pirotro August 2013, PI was at NASA JSC. Project Type: GROUND Solicitation / Funding Source: Directed Research Start Date: 10/01/2019 End Date: 09/30/2021 No. of Past Does: No. of Master' Degrees: No. of PhD Degrees: No. of PhD Degrees: No. of PhD Candidates: No. of Bachelor's Degrees: No. of Master' Scandidates: No. of Bachelor's Candidates: No. of Bachel	Program/Discipline Element/Subdiscipline:				
Human Research Program Risks: (1) Sensorimotor-Risk of Albered Sensorimotor-Vestibular Function Impacting Critical Mission Tasks Space Biology Cross-Element Discipline: None Space Biology Cross-Element Discipline: Space Biology Special Category: None PI Email: scotti, wood/finana.cov Fax: FY Pl Organization Type: NASA CENTER NASA Johnson Space Center PI Address 1: 2101 NASA Parkway PI Address 2: Mail code SD2 PI Web Page: City: Houston State: TX Zip Code: 77058 Congressional District: 36 Comments: NOTE: PI returned to NASA JSC in January 2017, PI was at Azusa Pacific University from August 2013 - January 2017; prior to August 2013; PI was at NASA JSC. Project Type: GROUND Solicitation / Funding Source: Directed Research No. of Pab Decres: No. of Pab Decres: No. of PhD Candidates: No. of Bachelor's Degrees: No. of Master' Degrees: No. of Master's Candidates: No. of Master's Candidates: No. of Master's Candidates: No. of Bachelor's Candidates: No. of Master's Candidates: No. of Master's Candidates: No. of Master's Candidates: No. of Bachelor's Candidates: No. of Master's Candidates: No. of Rachelor's Degrees: No. of Bachelor's Degrees: No. of Bachelor's Candidates: No. of Master's Candidates: No. of Master's Candidates: No. of Master's Candidates: No. of Rachelor's Degrees: No. of Master's Candidates: No. of Rachelor's Degrees: No. of Rachelor's Candidates: No. of Rachelor's Degrees: No. of Rachelor's Candidates: No. of Rachelor's Degrees: No. of Rachelor's Candidates: No. of Rachelor's Candidates: No. of Rachelor's Degrees: No. of R	Joint Agency Name:	TechPort:		No	
Space Biology Cross-Element Space Biology Cross-Element Space Biology Special Category: None PI Email: scott i wood@masa.gov Fax: FY PI Organization Type: NASA CENTER Phone: (281) 483-6329 Organization Type: NASA Johnson Space Center PI Address 1: 2101 NASA Parkway PI Address 2: Mail code SD2 PI Web Page: City: Houston State: TX City: Houston NOTE: PI orturned to NASA JSC in January 2017. PI was at Azusa Pacific University from August 2013 – January 2017; prior to August 2013, PI was at NASA JSC. Comments: OROUND Solicitation / Funding Source Directed Research Start Date: No. of Pab Degrees: No. of Pab Degrees: No. of Pab Degrees: No. of Pab Candidates: No. of Master's Candidates: No. of Bachelor's Candidates: No. of	Human Research Program Elements:	(1) HHC :Human Health Countermeasures			
Space Biology Cross-Element Discipline: Space Biology Special Category: None PI Email: Sout Liveodofanasa gov Fax: FY Pl Organization Type: NASA CENTER Phone: (281) 483-6329 Organization Name: NASA Johnson Space Center PI Address 1: 2101 NASA Parkway PI Address 2: Mail code SD2 PI Web Page: City: Ilouston State: TX Zip Code: 770:8 Comments: NOTE: PI returned to NASA JSC in January 2017, PI was at Azusa Pacific University from August 2013 – January 2017, prior to August 2013, PI was at NASA JSC. Comments: OROND Solicitation / Funding Source: Directed Research Start Date: 10/01/2019 Solicitation / Funding Source: Directed Research No. of Post Docs: No. of Post Docs: No. of Post Docs: No. of Bachelor's Candidates: No. of Master' Degrees: No. of Bachelor's Candidates: No. of Bachelor's Candidate	Human Research Program Risks:	(1) Sensorimotor: Risk of Altered Sensorimotor/Vestibular Function Impacting Critical Mission Tasks			
Discipline: " Space Biology Special Category: None PI Email: scott.invood@nasa.gov Fax: FY PI Organization Type: NASA CENTER Phone: (281) 483-6329 Organization Name: NASA Johnson Space Center PI Address 1: 2101 NASA Parkway PI Address 2: Mail code SD2 PI Web Page: City: Houston State: TX Zjp Code: 77058 Congressional District: 36 Comments: NOTE: PI returned to NASA JSC in January 2017. PI was at Azusa Pacific University from August 2013 – January 2017; prior to August 2013, PI was at NASA JSC. Project Type: GROUND Solicitation / Funding Source: Directed Research Start Date: 1001/2019 Find Date: 09/30/2021 No. of Post Does: No. of PhD Degrees: No. of PhD Candidates: No. of Bachelor's Degrees: No. of Master's Candidates: No. of Bachelor's Degrees: No. of Bachelor's Candidates: No. of Bachelor's Degrees: No. of Bachelor's Candidates: Contact Phone: Contact Honicity Peler norsk@mass.gov Flight Program: Flight Assignment: Key Personnel Changes/Previous PI: Bloomberg, Jacob Ph.D. (NASA Johnson Space Center-retired) Clark, Terin Ph.D. Ph. (University of Utah) Oddsson, Lars Ph.D. (University of Utah) Oddsson, Lars Ph.D. (University of Utah) Oddsson, Lars Ph.D. (University of Itah) Theroic, Corey Ph.D. (University of Florida) Therice, Corey Ph.D. (University of Florida) Theroic, Corey Ph.D. (University of Florida)	Space Biology Element:	None			
PI Email: scott_i.wood@nasa.gov Fax: FY PI Organization Type: NASA CENTER Phone: (281) 483-6329 Organization Type: NASA CENTER Phone: (281) 483-6329 Organization Name: NASA Johnson Space Center PI Address 1: 2101 NASA Parkway PI Address 2: Mail code SD2 PI Web Page: City: Ilouston State: TX Zip Code: 77058 Coagressional District: 36 Comments: NOTE: PI returned to NASA JSC in January 2017. PI was at Azusa Pacific University from August 2013 – January 2017: prior to August 2013, PI was at NASA JSC. Project Type: GROUND Solicitation / Funding Source: Directed Research Start Date: 10/01/2019 Solicitation / Funding Source: Directed Research Start Date: No. of Pab Degrees: No. of Pab Degrees: No. of Master' Degrees: No. of Master's Candidates: No. of Master' Degrees: No. of Master's Candidates: No. of Bachelor's Degrees: No. of Bachelor's Candidates: No. of Bachelor's Degrees: No. of Bachelor's Candidates: No. of Bachelor's Degrees: No. of Bachelor's Candidates: Contact Phone: Contact Email: Peter norsk@nasa.gov Elight Program: Elight Program: Elight Assignment: Key Personnel Changes/Previous PI: Bloomberg, Jacob Ph.D. (NASA Johnson Space Center) Koppelmans, Vincent Ph.D. (University of Clorado Boulder, Aerospace Engineering Sciences) Peters, Brian Ph.D. (University of Florida) Pleters, Brian Ph.D. (University of Florida) Theriot. Corey Ph.D. (University of Florida)	Space Biology Cross-Element Discipline:	None			
Pl Organization Type: NASA CENTER Phone: (281) 483-6329 Organization Name: NASA Johnson Space Center Pl Address 1: 2101 NASA Parkway Pl Address 2: Mail code SD2 Pl Web Page: City: Houston State: TX Zip Code: 77058 Congressional District: 36 Comments: NOTE: PI returned to NASA JSC in January 2017. Pl was at Azusa Pacific University from August 2013 – January 2017; prior to August 2013, Pl was at NASA JSC. Project Type: GROUND Solicitation / Funding Source: Directed Research Start Date: 1001/2019 Send of PhD Degrees: No. of PhD Candidates: 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 No. of Bachelor's Deg	Space Biology Special Category:	None			
Organization Name: NASA Johnson Space Center Pl Address 1: 2101 NASA Parkway Pl Address 2: Mail code SD2 Pl Web Page: City: Houston State: TX Zip Code: 77058 Congressional District: 36 Comments: NOTE: Pl returned to NASA JSC in January 2017. Pl was at Azusa Pacific University from August 2013 – January 2017. prior to August 2013, Pl was at NASA JSC. Project Type: GROUND Solicitation / Funding Source: Directed Research Start Date: 10/01/2019 End Date: 09/30/2021 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: No. of Bachelor's Degrees: No. of Bachelor's Candidates: No. of Sachelor's Candidates: No. of Sachelor's Contact Hone: Contact Monitor: Norsk, Peter Contact Hone: Contact Honitor: Norsk, Peter Contact Phone: Contact Honges/Previous Pl: Key Personnel Changes/Previous Pl: Key Personnel Changes/Previous Pl: Key Personnel Changes/Previous Pl. COI Name (Institution): Directed Research Directed Research Directed Research Directed Research Directed Research	PI Email:	scott.j.wood@nasa.gov	Fax:	FY	
PI Address 1: 2101 NASA Parkway PI Address 2: Mail code SD2 PI Web Page: City: Houston State: TX Zip Code: 77058 Congressional District: 36 Comments: NOTE: PI returned to NASA JSC in January 2017. PI was at Azusa Pacific University from August 2013 – January 2017; prior to August 2013, PI was at NASA JSC. Project Type: GROUND Solicitation / Funding Source: Directed Research Start Date: 10:01/2019 Solicitation / Funding Source: Directed Research Start Date: 10:001/2019 End Date: 09/30/2021 No. of PhD Candidates: No. of Master' Degrees: No. of Master's Candidates: No. of Master' Degrees: No. of Master's Candidates: No. of Master' Degrees: No. of Bachelor's Degrees: No. of Sachelor's Candidates: No. of Master' Degrees: No. of Master' Degrees: No. of Master's Degrees: No. of Sachelor's Candidates: No. of Master' Degrees: No. of Master' Degrees: No. of Master's Degrees: No. of Bachelor's Degrees: No. of Master's Degrees: No. of No. of Master's Degrees: No. of No. of Master's Degrees: No. of No. of Nash Johnson Space Center No. of No. of Nash Johnson Space Center No. of No. of No. Nash Johnson Space Center No. of No. of No. of No. of No. of No. of No. Nash Johnson Space Center No. of No. o	PI Organization Type:	NASA CENTER	Phone:	(281) 483-6329	
PI Address 2: Mail code SD2 PI Web Page: City: Houston State: TX Zip Code: 77058 Congressional District: 36 Comments: NOTE: PI returned to NASA JSC in January 2017. PI was at Azusa Pacific University from August 2013 – January 2017; prior to August 2013, PI was at NASA JSC. Project Type: GROUND Solicitation / Funding Source: Directed Research Start Date: 10/01/2019 End Date: 09/30/2021 No. of PhD Candidates: No. of Master' 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: Norsk, Peter Contact Phone: Contact Email: Peter.norsk@nasa.gov Flight Program: Flight Assignment: Key Personnel Changes/Previous PI: COI Name (Institution): Bloomberg, Jacob Ph.D. (NASA Johnson Space Center - Koppelmans, Vincent Ph.D. (University of Colorado Boulder, Aerospace Engineering Sciences) Feiveson, Alan Ph.D. (NASA Johnson Space Center) Koppelmans, Vincent Ph.D. (University of Uninnesota) Peters, Brian Ph.D. (EBRWyvle/NASA Johnson Space Center) Reschke, Millard Ph.D. (NASA Johnson Space Center) Reschke, Millard P	Organization Name:	NASA Johnson Space Center			
PI Web Page: City: Houston State: TX Zip Code: 77058 Congressional District: 36 Comments: NOTE: PI returned to NASA JSC in January 2017. PI was at Azusa Pacific University from August 2013 – January 2017, prior to August 2013, PI was at NASA JSC. Project Type: GROUND Solicitation / Funding Source: Directed Research Start Date: 10/01/2019 End Date: 09/30/2021 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 Master's Candidates: No. of Bachelor's Degrees: No. of Bachelor's Candidates: No. of Master' Degrees: No. of Master's Candidates: No. of Master' Degrees: No. of Master's Candidates: No. of Master' Degrees: No. of Master' Degrees: No. of Master's Candidates: No. of Master' Degrees: No. of Master' Degrees: No. of Master's Candidates: No. of Bachelor's Degrees: No. of Bachelor's Degrees: No. of Master' Degrees: No. of Master's Candidates: No. of Bachelor's Degrees: No. of Master' Degrees: No. of Ma	PI Address 1:	2101 NASA Parkway			
City: Houston State: TX Zip Code: 77058 Congressional District: 36 Comments: NOTE: PI returned to NASA JSC in January 2017. PI was at Azusa Pacific University from August 2013 – January 2017; prior to August 2013, PI was at NASA JSC. Project Type: GROUND Solicitation / Funding Source: Directed Research Start Date: 10/01/2019 End Date: 09/30/2021 No. of Post Docs: No. of PhD Degrees: No. of PhD Candidates: No. of Master' Degrees: No. of Master's 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: Norsk, Peter Contact Phone: Contact Email: Peter.norsk@nasa.gov Flight Program: Flight Assignment: Key Personnel Changes/Previous PI: Bloomberg, Jacob Ph.D. (NASA Johnson Space Center - retired) Clark, Torin Ph.D. (University of Colorado Boulder, Aerospace Engineering Sciences) Feiveson, Alan Ph.D. (NASA Johnson Space Center) Scieller, Rachael Ph.D. (University of Minnesota) Peters, Brian Ph.D. (University of Minnesota) Peters, Brian Ph.D. (VASA Johnson Space Center) Scieller, Rachael Ph.D. (University of Texas Medical Branch) Grant/Contract No.: Directed Research Performance Goal No.:	PI Address 2:	Mail code SD2			
Zip Code: 77058 Congressional District: 36 Comments: NOTE: PI returned to NASA JSC in January 2017, PI was at Azusa Pacific University from August 2013 – January 2017; prior to August 2013, PI was at NASA JSC. Project Type: GROUND Solicitation / Funding Source: Directed Research Start Date: 10:01/2019 End Date: 09/30/2021 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: No. of Bachelor's Degrees: No. of Bachelor's Candidates: Monitoring Center: NASA JSC Contact Monitor: Norsk, Peter Contact Phone: Contact Email: Peter.norsk@nasa.gov Flight Program: Flight Assignment: Key Personnel Changes/Previous PI: Bloomberg, Jacob Ph.D. (NASA Johnson Space Center—retired) Clark, Torin Ph.D. (University of Colorado Boulder, Aerospace Engineering Sciences) Feiveson, Alan Ph.D. (NASA) Johnson Space Center) Koppelmans, Vincent Ph.D. (University of Unlah) Oddsson, Lars Ph.D. (University of Winnesota) Peters, Brian Ph.D. (NASA) Johnson Space Center) Scidler, Rachael Ph.D. (University of Florida) Theriot, Corey Ph.D. (University of Florida) Theriot, Corey Ph.D. (University of Florida) Theriot, Corey Ph.D. (University of Texas Medical Branch)	PI Web Page:				
Comments: NOTE: PI returned to NASA JSC in January 2017. PI was at Azusa Pacific University from August 2013 – January 2017; prior to August 2013, PI was at NASA JSC. Project Type: GROUND Solicitation / Funding Source: Directed Research Start Date: 10/01/2019 End Date: 09/30/2021 No. of PhD Degrees: No. of PhD Degrees: No. of PhD Candidates: No. of Master' Degrees: No. of Master's Candidates: No. of Master's Candidates: No. of Bachelor's Candidates: No. of Bachelor's Candidates: Norsk, Peter Contact Monitor: Norsk, Peter Contact Email: Peter.norsk@nasa.gov Flight Program: Flight Assignment: Key Personnel Changes/Previous PI: Bloomberg, Jacob Ph.D. (NASA Johnson Space Center—retired) Clark, Torin Ph.D. (University of Colorado Boulder, Aerospace Engineering Sciences) Feiveson, Alan Ph.D. (NASA Johnson Space Center) Koppelmans, Vincent Ph.D. (University of Utah) Oddson, Lars Ph.D. (University of Minnesotta) Peters, Brian Ph.D. (KBRwyle/NASA Johnson Space Center) Sedier, Rachael Ph.D. (University of Texas Medical Branch) Grant/Contract No.: Directed Research	City:	Houston	State:	TX	
2017; prior to August 2013, PI was at NASA JSC. Project Type: GROUND Solicitation / Funding Source: Directed Research Start Date: 10/01/2019 End Date: 09/30/2021 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: Norsk, Peter Contact Phone: Contact Email: Peter.norsk@nasa.gov Flight Program: Flight Assignment: Key Personnel Changes/Previous PI: Bloomberg, Jacob Ph.D. (NASA Johnson Space Center-retired) Clark, Torin Ph.D. (University of Colorado Boulder, Aerospace Engineering Sciences) Feiveson, Alan Ph.D. (NASA Johnson Space Center) Koppelmans, Vincent Ph.D. (University of Utah) Oddsson, Lars Ph.D. (University of Minnesota) Peters, Brian Ph.D. (KBRwyle/NASA Johnson Space Center) Seidler, Rachael Ph.D. (University of Florida) Theriot, Corey Ph.D. (University of Texas Medical Branch) Grant/Contract No.: Directed Research Performance Goal No.:	Zip Code:	77058 Congressional	District:	36	
Start Date: 10/01/2019 End Date: 09/30/2021 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: Norsk, Peter Contact Phone: Contact Email: Peter.norsk@nasa.gov Flight Program: Flight Assignment: Key Personnel Changes/Previous PI: Bloomberg, Jacob Ph.D. (NASA Johnson Space Centerretired) Clark, Torin Ph.D. (University of Colorado Boulder, Aerospace Engineering Sciences) Feiveson, Alan Ph.D. (NASA Johnson Space Center) Koppelmans, Vincent Ph.D. (University of Utah) Oddsson, Lars Ph.D. (University of Winnessta) Peters, Brian Ph.D. (KBRwyle/NASA Johnson Space Center) Seidler, Rachael Ph.D. (University of Florida) Theriot, Corey Ph.D. (University of Texas Medical Branch) Grant/Contract No.: Directed Research Performance Goal No.:	Comments:		rsity from	August 2013 – January	
No. of Post Docs: No. of PhD Candidates: No. of Master's Candidates: No. of Master's Candidates: No. of Bachelor's Candidates: Norsk, Peter Contact Monitor: Norsk, Peter Contact Phone: Contact Email: Peter.norsk@nasa.gov Flight Program: Flight Assignment: Key Personnel Changes/Previous PI: Bloomberg, Jacob Ph.D. (NASA Johnson Space Center-retired) Clark, Torin Ph.D. (University of Colorado Boulder, Aerospace Engineering Sciences) Feiveson, Alan Ph.D. (University of Utah) Oddsson, Lars Ph.D. (University of Utah) Oddsson, Lars Ph.D. (University of University of Utah) Peters, Brian Ph.D. (KBRwyle/NASA Johnson Space Center) Seidler, Rachael Ph.D. (University of Florida) Theriot, Corey Ph.D. (University of Texas Medical Branch) Grant/Contract No.: Directed Research Performance Goal No.:	Project Type:	GROUND Solicitation / Funding	g Source:	Directed Research	
No. of PhD Candidates: No. of Master' Degrees: No. of Master's Candidates: No. of Bachelor's Degrees: No. of Bachelor's Degrees: No. of Bachelor's Degrees: No. of Master' Degrees: No. of Bachelor's Degrees: N	Start Date:	10/01/2019 E	and Date:	09/30/2021	
No. of Master's Candidates: No. of Bachelor's Degrees: No. of Bachelor's Candidates: No. of Bachelor's Candidates: Norsk, Peter Contact Monitor: Norsk, Peter Contact Phone: Contact Email: Peter.norsk@nasa.gov Flight Program: Flight Assignment: Key Personnel Changes/Previous PI: Bloomberg, Jacob Ph.D. (NASA Johnson Space Centerretired) Clark, Torin Ph.D. (University of Colorado Boulder, Aerospace Engineering Sciences) Feiveson, Alan Ph.D. (NASA Johnson Space Center) Koppelmans, Vincent Ph.D. (University of Utah) Oddsson, Lars Ph.D. (University of Minnesota) Peters, Brian Ph.D. (KBRwyle/NASA Johnson Space Center) Reschke, Millard Ph.D. (NASA Johnson Space Center) Seidler, Rachael Ph.D. (University of Florida) Theriot, Corey Ph.D. (University of Texas Medical Branch) Grant/Contract No.: Directed Research Performance Goal No.:	No. of Post Docs:	No. of PhD	Degrees:		
No. of Bachelor's Candidates: Norsk, Peter Contact Monitoring Center: NASA JSC Contact Monitoring Center: NASA JSC Contact Monitoring Center: NASA JSC Contact Email: Peter.norsk@nasa.gov Flight Program: Flight Assignment: Key Personnel Changes/Previous PI: Bloomberg, Jacob Ph.D. (NASA Johnson Space Centerretired) Clark, Torin Ph.D. (University of Colorado Boulder, Aerospace Engineering Sciences) Feiveson, Alan Ph.D. (NASA Johnson Space Center) Koppelmans, Vincent Ph.D. (University of Utah) Oddsson, Lars Ph.D. (University of Minnesota) Peters, Brian Ph.D. (NASA Johnson Space Center) Reschke, Millard Ph.D. (Naska Johnson Space Center) Seidler, Rachael Ph.D. (University of Florida) Theriot, Corey Ph.D. (University of Florida) Theriot, Corey Ph.D. (University of Florida) Theriot, Corey Ph.D. (University of Texas Medical Branch)	No. of PhD Candidates:	No. of Master'	Degrees:		
Contact Monitor: Norsk, Peter Contact Email: Peter.norsk@nasa.gov Flight Program: Flight Assignment: Key Personnel Changes/Previous PI: Bloomberg, Jacob Ph.D. (NASA Johnson Space Centerretired) Clark, Torin Ph.D. (University of Colorado Boulder, Aerospace Engineering Sciences) Feiveson, Alan Ph.D. (NASA Johnson Space Center) Koppelmans, Vincent Ph.D. (University of Utah) Oddsson, Lars Ph.D. (University of Minnesota) Peters, Brian Ph.D. (KBRwyle/NASA Johnson Space Center) Reschke, Millard Ph.D. (NASA Johnson Space Center) Seidler, Rachael Ph.D. (University of Florida) Theriot, Corey Ph.D. (University of Texas Medical Branch) Grant/Contract No.: Directed Research Performance Goal No.:	No. of Master's Candidates:	No. of Bachelor's	Degrees:		
Contact Email: Peter.norsk@nasa.gov Flight Program: Flight Assignment: Key Personnel Changes/Previous PI: Bloomberg, Jacob Ph.D. (NASA Johnson Space Centerretired) Clark, Torin Ph.D. (University of Colorado Boulder, Aerospace Engineering Sciences) Feiveson, Alan Ph.D. (NASA Johnson Space Center) Koppelmans, Vincent Ph.D. (University of Utah) Oddsson, Lars Ph.D. (University of Minnesota) Peters, Brian Ph.D. (KBRwyle/NASA Johnson Space Center) Reschke, Millard Ph.D. (NASA Johnson Space Center) Seidler, Rachael Ph.D. (University of Florida) Theriot, Corey Ph.D. (University of Texas Medical Branch) Grant/Contract No.: Directed Research Performance Goal No.:	No. of Bachelor's Candidates:	Monitoring	g Center:	NASA JSC	
Flight Assignment: Key Personnel Changes/Previous PI: Bloomberg, Jacob Ph.D. (NASA Johnson Space Centerretired) Clark, Torin Ph.D. (University of Colorado Boulder, Aerospace Engineering Sciences) Feiveson, Alan Ph.D. (NASA Johnson Space Center) Koppelmans, Vincent Ph.D. (University of Utah) Oddsson, Lars Ph.D. (University of Minnesota) Peters, Brian Ph.D. (KBRwyle/NASA Johnson Space Center) Reschke, Millard Ph.D. (NASA Johnson Space Center) Seidler, Rachael Ph.D. (University of Florida) Theriot, Corey Ph.D. (University of Texas Medical Branch) Grant/Contract No.: Directed Research Performance Goal No.:	Contact Monitor:	Norsk, Peter Contact	ct Phone:		
Flight Assignment: Key Personnel Changes/Previous PI: Bloomberg, Jacob Ph.D. (NASA Johnson Space Centerretired) Clark, Torin Ph.D. (University of Colorado Boulder, Aerospace Engineering Sciences) Feiveson, Alan Ph.D. (NASA Johnson Space Center) Koppelmans, Vincent Ph.D. (University of Utah) Oddsson, Lars Ph.D. (University of Minnesota) Peters, Brian Ph.D. (KBRwyle/NASA Johnson Space Center) Reschke, Millard Ph.D. (NASA Johnson Space Center) Seidler, Rachael Ph.D. (University of Florida) Theriot, Corey Ph.D. (University of Texas Medical Branch) Grant/Contract No.: Directed Research Performance Goal No.:	Contact Email:	Peter.norsk@nasa.gov			
Bloomberg, Jacob Ph.D. (NASA Johnson Space Centerretired) Clark, Torin Ph.D. (University of Colorado Boulder, Aerospace Engineering Sciences) Feiveson, Alan Ph.D. (NASA Johnson Space Center) Koppelmans, Vincent Ph.D. (University of Utah) Oddsson, Lars Ph.D. (University of Minnesota) Peters, Brian Ph.D. (KBRwyle/NASA Johnson Space Center) Reschke, Millard Ph.D. (NASA Johnson Space Center) Seidler, Rachael Ph.D. (University of Florida) Theriot, Corey Ph.D. (University of Texas Medical Branch) Grant/Contract No.: Directed Research Performance Goal No.:	Flight Program:				
Bloomberg, Jacob Ph.D. (NASA Johnson Space Centerretired) Clark, Torin Ph.D. (University of Colorado Boulder, Aerospace Engineering Sciences) Feiveson, Alan Ph.D. (NASA Johnson Space Center) Koppelmans, Vincent Ph.D. (University of Utah) Oddsson, Lars Ph.D. (University of Minnesota) Peters, Brian Ph.D. (NASA Johnson Space Center) Reschke, Millard Ph.D. (NASA Johnson Space Center) Seidler, Rachael Ph.D. (University of Florida) Theriot, Corey Ph.D. (University of Texas Medical Branch) Grant/Contract No.: Directed Research Performance Goal No.:	Flight Assignment:				
Clark, Torin Ph.D. (University of Colorado Boulder, Aerospace Engineering Sciences) Feiveson, Alan Ph.D. (NASA Johnson Space Center) Koppelmans, Vincent Ph.D. (University of Utah) Oddsson, Lars Ph.D. (University of Minnesota) Peters, Brian Ph.D. (KBRwyle/NASA Johnson Space Center) Reschke, Millard Ph.D. (NASA Johnson Space Center) Seidler, Rachael Ph.D. (University of Florida) Theriot, Corey Ph.D. (University of Texas Medical Branch) Grant/Contract No.: Directed Research Performance Goal No.:	Key Personnel Changes/Previous PI:				
Performance Goal No.:	COI Name (Institution):	Clark, Torin Ph.D. (University of Colorado Boulder, Aerospace Engineering Sciences) Feiveson, Alan Ph.D. (NASA Johnson Space Center) Koppelmans, Vincent Ph.D. (University of Utah) Oddsson, Lars Ph.D. (University of Minnesota) Peters, Brian Ph.D. (KBRwyle/NASA Johnson Space Center) Reschke, Millard Ph.D. (NASA Johnson Space Center) Seidler, Rachael Ph.D. (University of Florida) Theriot, Corey Ph.D. (University of Texas Medical Branch)			
	Grant/Contract No.:	Directed Research			
Performance Goal Text:	Performance Goal No.:				
	Performance Goal Text:				

Task Book Report Generated on: 04/25/2024

[NOTE April 2020: Continuation of "Sensorimotor Predictors of Postlanding Functional Task Performance (PI=Bloomberg)," with new Principal Investigator Dr. Scott Wood, due to previous PI Dr. Jacob Bloomberg's retirement. Dr. Ajitkumar P. Mulavara was original PI of this project] Microgravity exposure results in an adaptive central reinterpretation of information from multiple sensory sources to produce a sensorimotor state appropriate for motor actions in this unique environment, but this new adaptive state is no longer appropriate for the 1G gravitational environment on Earth. These alterations may disrupt the ability to perform mission critical functional tasks requiring ambulation, manual control, and gaze stability. Astronauts who return from spaceflight show significant inter-subject variations in their abilities to readapt to a gravitational environment. The ability to predict the manner and degree to which each individual astronaut will be affected would improve the effectiveness of countermeasure training programs designed to enhance sensorimotor adaptability. For such an approach to succeed, we must develop predictive measures of sensorimotor adaptability that will allow us to determine, before actual spaceflight, which crewmembers will experience the largest challenges in adaptive capacity. Obtaining this information will allow us to design and implement better sensorimotor adaptability training countermeasures that will be customized for each crewmember's unique adaptive capabilities. **Task Description:** The goal of this project is to characterize a set of predictive measures that include: 1. behavioral tests to assess sensory bias and adaptability; 2. imaging to determine individual brain morphological and functional features; 3. genotype markers for genetic polymorphisms that play a role in the neural pathways underlying sensorimotor adaptation. Deliverables: This study will target recruitment of up to n=30 with no less than 15 subjects for this study including completing data collection for n=15 subjects and analysis (x 1 test session). Risk Characterization, quantification, and evidence will be provided in final report and publication. This project will produce a set of predictive measures to determine individual capability for rapid sensorimotor adaptation allowing the determination of volume and type of sensorimotor adaptability training countermeasures targeted for individual sensory integration profiles. This will also additionally inform the program on the ability to predict individual sensorimotor risk profile associated with spaceflight. The proposed works qualifies for directed research under the "Highly Constrained Research" category in the Human Research Program (HRP) Unique Processes, Criteria, and Guidelines. This project will utilize the findings from two previous studies (SM Predictors-Ground, SM Predictors-Retrospective) that were funded by the NASA Human Research Program (HRP) through a National Space Biomedical Research Institute (NSBRI) cooperative agreement. These studies have validated, in a non-astronaut ground population, a unique set of measures that were predictive of adaptation in response to exposure to novel sensorimotor environments. Predictors were evaluated in three categories, including: 1) behavioral tests to assess sensory bias and adaptability; 2) imaging to determine individual brain morphological and functional features; and 3) genotype markers for genetic polymorphisms that play a role in the neural pathways underlying sensorimotor adaptation. These two studies were conducted to help characterize the sensorimotor risk profile and design sensorimotor adaptability training countermeasures that may be customized for each crewmember's individual characteristics. In addition to collecting data from ground subjects, the SM Predictors-Retrospective study gathered data from six crewmembers, and from three subjects who participated in a bed Rationale for HRP Directed Research: rest campaign in the past. While these data supported the validity of the tested measures, the small number of subjects in this part of the study limited the interpretation of the collected data, and logistical challenges (namely, the end of the NSBRI cooperative agreement) precluded recruiting additional astronaut subjects until now. Meeting HRP's goal of addressing gap SM 24 requires collection of data from additional crewmembers who fit the recruitment criteria for this study (crewmembers for whom functional task performance data sets exists after previous spaceflight missions). This proposed effort will thus build-upon the findings from the previous studies, with the full data set (from both the prior study and the proposed one) used to build predictive models of postflight functional task performance capabilities. Since this study directly builds upon the two prior studies and data needs to be collected seamlessly, it requires the specific expertise that has been developed within the NASA Johnson Space Center Neurosciences Laboratory. Therefore, the work reflects "focused and constrained data gathering and analysis that is more appropriately obtained through a non-competitive proposal." The goal of this study is to identify a set of behavioral, neuroimaging, and genetic measures that can be used to predict early post-flight performance on a set of sensorimotor tasks. We expect that understanding the relationships between these biomarkers and post-flight functional task performance will improve both our understanding of the individual Research Impact/Earth Benefits: variability and our strategy to optimize sensorimotor countermeasures. These same biomarkers may also be useful for understanding individual variability in balance function in the general population, and predicting sensory compensation associated with aging and/or the onset of vestibular disease. New project for FY2020. NOTE April 2020: Continuation of "Sensorimotor Predictors of Postlanding Functional Task Performance (PI=Bloomberg)," with new Principal Investigator Dr. Scott Wood, due to previous PI Dr. Jacob Bloomberg's retirement. Task Progress: Dr. Ajitkumar P. Mulavara was original PI of this project]

Description: (Last Updated: 03/08/2024)

Bibliography Type: