ANALOG STUDY

RESOURCE WORKSHEET (FOR NON-BED REST STUDIES)

I. General Information

1. Principal Investigator:

2. Investigation/Activity title:

3. Investigation/Activity objective:

4. HRP Risk/Gap/Task/Deliverable the study addresses:

5. Study Duration:

6. Study Need Date:

II. Subject Information

1. Number of subjects?

2. Gender preference/distribution of subjects? M ☐ F ☐ No preference ☐

3. Age range of subjects?

4. Describe required fitness level of subjects (e.g., good health with no history of cardiovascular, neurological, gastrointestinal, or musculoskeletal problems):

III. Inclusion/Exclusion Criteria

1. Please specify any inclusion criteria:

2. Please specify any exclusion criteria:

IV. Facility Requirements

1. Please indicate infrastructure and support services needed (e.g., laboratory, medical, internet, metabolic kitchen, office, sleeping accommodations,

   transportation, support personnel, safety):

2. Is hardware required (e.g., test equipment, laboratory equipment, tooling)?:

3. Is shipping support required to deliver the hardware to the analog? Yes ☐ No ☐

   *****If yes, please provide specific information and details:

4. Is setup support required for the hardware when it arrives at the analog?
   Yes ☐ No ☐

   *If yes, please provide specific information and details:

5. Is software required (e.g., Commercial Off The Shelf, Custom)?:

6. Is connectivity required (e.g., access to NASA systems, networks, applications)?:

7. Are there special badging considerations (e.g., foreign national)?

8. Identify all environmental conditions required to meet study objectives by listing specific information in the appropriate boxes below. Please explain required environmental conditions not listed in the "other" space provided:

   a. internal lighting conditions required:

b. external lighting conditions required:

c. dangerous environment (environment that has a threat of injury or death to a subject that is similar to a space flight environment):

d. physical isolation required:

e. required space for habitability of environment:

f. volume characteristics of environment required:

g. personal space required:

h. specific team size requirements:

i. leadership requirements of crew:

j. team structure of crew required:

k. rest & recreational options required:

l. quality of life support conditions required:

m. workload requirements:

n. mission duration:

o. requirements of communication with outside:

p. level of external ground control:

q. exposure time:

r. task relevance:

s. pre-packaged food that will need to be used:

t. type of specific terrain needed:

u. other:

9. Are extreme environment/conditions required to meet study objectives?

Yes ☐ No ☐

*If yes please identify those conditions(e.g. unable to reach medical treatment within an hour, extended time in a saturation dive, inability to return quickly, dangerous or hazardous operations, etc.):

10. Identify simulation requirements (e.g., confinement, fractional gravity, isolation from outside world (difficult logistics), limited local infrastructure, remote communications, autonomous operations, autonomous medical care or "telemedicine", Moon/Mars – relevant field/EVA activities, Lunar surface, Martian surface)

V. Science Requirements

1. Provide a testing schedule in the table below. Include the name of the test/activity, dates required, and estimated subject time requirements in the table below. Time estimates should reflect the time required for testing of one subject; however, if an analog mission crewmember is required as the operator for an analog activity; their time should be included as well. Activities that are performed once regardless of the number of participants (e.g., set-up and stow) should be listed separately.

Pre-Study

Test/Activity	Schedule	Subject time (min)	
		Per Session X Number of Sessions	Total
E.g., Saliva Collection	*Twice during pre study phase*	*5 X 2*	*10*

In-Study

Test/Activity	Schedule	Subject time (min)	
		Per Session X Number of Sessions	Total
E.g., Saliva Collection	*One collection per week*	*5 X 4*	*20*

Post-Study

Test/Activity	Schedule	Subject time (min)	
		Per Session X Number of Sessions	Total
E.g., Saliva Collection	*Twice during the post study phase*	*5 X 2*	*10*

Follow-up

Test/Activity	Schedule	Subject time (min)	
		Per Session X Number of Sessions	Total
E.g., Saliva Collection	*N/A*	*0*	*0*

a. Is real-time data transmittal either required or highly desirable?

(NOTE: "Required" means that the experiment cannot be performed if data transmittal infrastructure is not available; "highly desired" means that the experiment data will be transmitted if the data transmittal infrastructure is available.)

b. How critical is the timing of the test/activity? Please explain any flexibility in the testing schedule, as well as critical testing times that cannot be moved (e.g. time point early or late in the mission, any activity that must be performed daily or weekly, and any activity requiring precisely timed operations):

c. Does the study require timely return of hardware or samples? Yes ☐ No ☐

*If "Yes", explain the nature of the requirement and the impacts if it cannot be met. Also indicate if early retrieval of items, special handling for samples (e.g., conditioned), encrypted data delivery, or hazardous shipment are required:

2. Is subject training required for implementing any tests? Yes ☐ No ☐

*If yes, please give a brief summary of the plan for providing any required training:

VI. Technical Expertise

Will the PI or their representative be present during the test/activity or resident at the analog during the study? Yes ☐ No ☐

*If no, please give a brief summary of the plan for providing any required technical expertise necessary for performing the study.