

**Institutional Review Board**

1204 Marie Mount Hall ● 7814 Regents Drive ● College Park, MD 20742 ● 301-405-4212 ● [irb@umd.edu](mailto:irb@umd.edu)

**CONSENT TO PARTICIPATE**

|  |  |  |
| --- | --- | --- |
| **Project Title** | *Experimental Investigation of Habitat Design Commonality Across Differing Gravitation Levels* | |
| **Purpose of the Study** | *This research is being conducted by* ***[Dr. David Akin and Lemuel Carpenter]*** *at the University of Maryland, College Park. We are inviting you to participate in this research project because are a healthy adult.*  *The purpose of this research is to study the effectiveness of different visual aids for operation of a robotic manipulator.* | |
| **Procedures** | *The procedures involve climbing stairs in a lab environment and climbing while wearing dive weights in the Neutral Buoyancy Research Facility (underwater). Iterations will be done to measure the impact of stair tread spacing and different weighted gravity levels (Martian (0.38 earth gravity) and Lunar (0.16 earth gravity).*  *The researchers will first explain the tasks and go through all unfamiliar equipment. This includes the safety debrief showing how to remove the weight vest for under water use and how to attach and detach from the fall arrestor (dry land and under water). Safety belts will be chosen to ensure correct fit. This briefing will be done before every control scheme change.*  *For each setup, the participant will ascend and descend the stairs and the time to complete each task will be recorded as well as motion capture data. Each trial will consist of ascending and descending 3-4 times and the total test time will not exceed 1.5 hours with breaks every half hour.*  *After each trial the participant will be asked to answer questions such as: “Rate Physical Demand on a 1-10 scale”, “Rate Mental Demand on a 1-10 scale”, “Rate Performance on a 1-10 scale” (1 is low/poor; 10 is high/well)* | |
| **Potential Risks and**  **Discomforts** | *Since this task involves climbing, a fall arrestor and safety belt will be used to avoid injury. For underwater tests, typical dive safety will be observed with an additional safety diver focusing solely on the test subject and their safety line. To reduce the likely hood of fatigue, subjects will be told to rest between ascent and descent trials. Subjects may also take a break or quit the test at any time at their sole discretion. Each tread has a high friction surface so chances of falling or slipping are minimal.* | |
| **Potential Benefits** | *There are no direct benefits from participating in this research.*  *This research is meant to provide empirical data to the user on the impact of tread spacing on and staircase angle at various gravity levels.* | |
| **Confidentiality** | *Any potential loss of confidentiality will be minimized by* *by storing data in a secure location.* ***[storing data in a secure location such as: locked office, locked cabinet, password protected computer, etc].***  *Your name will not be included on the surveys and other collected data; a code will be placed on the surveys and other collected data; through the use of an identification key, the researcher will be able to link our survey to your identity; and only the researchers will have access to the identification key.*  *If we write a report or article about this research project, your identity will be protected to the maximum extent possible. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law.* | |
| **Medical Treatment**  **[\*If Necessary]** | *The University of Maryland does not provide any medical, hospitalization or other insurance for participants in this research study, nor will the University of Maryland provide any medical treatment or compensation for any injury sustained as a result of participation in this research study, except as required by law.* | |
| **Compensation**  **[\*If Necessary]** | *You will not receive compensation. You will be responsible for any taxes assessed on the compensation.*  *If you will earn $100 or more as a research participant in this study, you must provide your name, address and SSN to receive compensation.*  *If you do not earn over $100 only your name and address will be collected to receive compensation.* | |
| **Right to Withdraw and Questions** | *Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.*  *If you decide to stop taking part in the study, if you have questions, concerns, or complaints, or if you need to report an injury related to the research, please contact the investigator:*  ***Dr. David Akin***  ***Building 382 Technology Dr., Room 2100D***  ***College Park, MD 20742***  ***301-405-1138***  ***dakin@ssl.umd.edu*** | |
| **Participant Rights** | *If you have questions about your rights as a research participant or wish to report a research-related injury, please contact:*  University of Maryland College Park  Institutional Review Board Office  1204 Marie Mount Hall  College Park, Maryland, 20742  E-mail: [irb@umd.edu](mailto:irb@umd.edu)  Telephone: 301-405-0678  *This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.* | |
| **Statement of Consent** | *Your signature indicates that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study. You will receive a copy of this signed consent form.*  *If you agree to participate, please sign your name below.* | |
| **Signature and Date** | **NAME OF PARTICIPANT**  **[Please Print]** |  |
| **SIGNATURE OF PARTICIPANT** |  |
| **DATE** |  |