Approved: 4/23/2019

## **Consent for Participation in Research**

Title: learning and memory with virtual reality: 2 Day Behavioral

#### Introduction

The purpose of this form is to provide you information that may affect your decision as to whether or not to participate in this research study. The person performing the research will answer any of your questions. Read the information below and ask any questions you might have before deciding whether or not to take part. If you decide to be involved in this study, this form will be used to record your consent.

## **Purpose of the Study**

You have been asked to participate in a research study about how people learn to associate events. The purpose of this study is to understand how different parts of the brain are involved in forming associations between images or sounds.

#### What will you be asked to do?

If you agree to participate in this study, you will be asked to do the following:

- Complete questionnaires on how you are feeling.
- View visual images or hear simple sounds.
- You may view images through a commercially available 3D virtual reality head mounted display. This display fits over your head and presents images in 3D.
- Perform an experimental task. You will be presented with repeated exposures of different stimuli. These stimuli may be pictures and/or simple sounds like tones. You may be asked to make responses according to the stimuli or merely observe the stimuli.
- Allow small electrodes to be placed on your hand, wrist, and under your right eye.
   An electrode is a small sensor placed on the body that is connected by a wire to a monitor. You feel no sensation from these electrodes.
- Have measures of how much you are sweating from sensors on your left hand that
  record the electrical conductance of your skin. Have a recording of your pulse rate
  from a sensor on your left hand. Have measures of muscle movements recorded from
  sensors under your right eye. The sensors that measure muscle movements are about
  half the size of a dime.

This study will take **60 minutes** and will include approximately **125** study participants each year. This study will include one more visit that will take 60 minutes to re-examine your responses to visual images or sounds. This second visit will occur within 1 week from the first visit. You will once again view visual images or hear simple sounds while we record how much you are sweating. You may receive shocks to your wrist on these additional visits. If you request to withdraw from the study at any time, your data will be immediately removed from all databases.

#### What are the risks involved in this study?

Participating in research presents a possible risk of loss of confidentiality. All efforts will be made to secure participant privacy. All participant data will be de-identified by labeling the data with an anonymous unique code. The link between the participant's personal data

(including the participant's name) and the unique code will be maintained by the PI and research associates dedicated to the research project.

The 3D virtual reality heat mounted display may cause discomfort such as eye strain, fatigue, or motion sickness. These effects will generally occur with prolonged use and go away once the head mounted display is removed. You can remove the head mounted display at any time if you feel discomfort.

# What are the possible benefits of this study?

You will receive no direct benefit from participating in this study; however, it is hoped that the knowledge gained on how emotion shapes learning and memory will be of benefit to others in the future.

#### Do you have to participate?

No, your participation is voluntary. You may decide not to participate at all or, if you start the study, you may withdraw at any time. You may contact Dr. Dunsmoor or a member of his research staff over email or the number provided at the end of this form Withdrawal or refusing to participate will not affect your relationship with The University of Texas at Austin or Dell Medical School in anyway. If you are a UT student or employee, your academic status, grades, or employment will not be affected by your participation. You will receive a copy of this form. Because the experiment does not include any clinical procedures and will have no impact on clinical care such as diagnosis or treatment, your results are not reported directly to you. If you would like to participate please read this consent and sign and date below.

#### Will there be any compensation?

You will receive \$15 per hour. This second visit will occur within 1 week from the first visit at the same location as the first day. Each visit will last 1 hour or less. Payments will occur at the conclusion of the study. If you chose to leave or are withdrawn from the study for any reason before finishing the entire study, you will be paid for each completed visit. You will receive compensation in cash and will be responsible for any taxes assessed on the compensation.

# How will your privacy and confidentiality be protected if you participate in this research study?

Confidentiality of your research records will be strictly maintained. Your privacy and the confidentiality of your data will be protected by labeling your data with an anonymous unique code in order to de-identify the data (remove information that identifies you). The de-identified data will be kept in locked files or maintained on a password protected network server in Dr. Dunsmoor's laboratory. Dr. Dunsmoor and his research staff will have access to this server. The link between the de-identified data and your information will be maintained by Dr. Dunsmoor and his research staff dedicated to this research project. All paper data will be shredded 3 years after the completion of the project and all digital data linking your information with the de-identified data code will be destroyed at this time as well. No individual identities will be used in any report or publications resulting from this study.

If it becomes necessary for the Institutional Review Board to review the study records, information that can be linked to you will be protected to the extent permitted by law. Your research records will not be released without your consent unless required by law or a court order. The data resulting from your participation may be made available to other researchers in the future for research purposes not detailed within this consent form. In these cases, the data will contain no identifying information that could associate it with you, or with your participation in any study.

#### Whom to contact with questions about the study?

Prior, during or after your participation you can contact the researcher **Joseph Dunsmoor** at **512-495-5144** or send an email to **joseph.dunsmoor@austin.utexas.edu** for any questions or if you feel that you have been harmed.

# Whom to contact with questions concerning your rights as a research participant?

For questions about your rights or any dissatisfaction with any part of this study, you can contact, anonymously if you wish, the Institutional Review Board by phone at (512) 471-8871 or email at orsc@uts.cc.utexas.edu.

## **Participation**

If you agree to participate please print, sign, and date below.

#### **Signature**

You have been informed about this study's purpose, procedures, possible benefits and risks, and you have received a copy of this form. You have been given the opportunity to ask questions before you sign, and you have been told that you can ask other questions at any time. You voluntarily agree to participate in this study. By signing this form, you are not waiving any of your legal rights.

Printed Name	
Signature	Date
As a representative of this study, I have explained the p involved in this research study.	urpose, procedures, benefits, and the risks
Print Name of Person obtaining consent	
Signature of Person obtaining consent	Date