

## **Subject's Consent Form: fMRI**

### **Functional Neuroimaging of Place Learning in a Computer-Generated Space.**

I AM BEING ASKED TO READ THE FOLLOWING MATERIAL TO ENSURE THAT I AM INFORMED OF THE NATURE OF THIS RESEARCH STUDY AND OF HOW I WILL PARTICIPATE IN IT, IF I CONSENT TO DO SO. SIGNING THIS FORM WILL INDICATE THAT I HAVE BEEN SO INFORMED AND THAT I GIVE MY CONSENT. FEDERAL REGULATIONS REQUIRE WRITTEN INFORMED CONSENT PRIOR TO PARTICIPATION IN THIS RESEARCH STUDY SO THAT I CAN KNOW THE NATURE AND THE RISKS OF MY PARTICIPATION AND CAN DECIDE TO PARTICIPATE OR NOT PARTICIPATE IN A FREE AND INFORMED MANNER.

#### **Purpose**

I am invited to participate voluntarily in the project named above. The purpose of the project is to learn more about the brain changes that are associated with learning about places in space.

#### **Selection Criteria**

I am being invited to participate because I am between the ages of 18 and 55 and:

- I have never participated in a virtual arena experiment from this lab before.
- I am familiar with the virtual arena experiment.

The study will include approximately 100 participants.

#### **Procedures**

If I agree to participate, I will fill out an MRI safety screening form. I will be asked to have a Magnetic Resonance (MR) image of my head. This will involve lying quietly inside the center of a large doughnut-shaped magnet. My head will be secured with foam pillows and velcro straps to help keep my head still. While I am inside the scanner, I may be asked to look at pictures that are presented on a computer screen. The entire examination will take approximately 20-30 minutes.

After I am out of the MRI machine, I will be asked to sit in front of a computer and find my way around a virtual arena looking through the same goggles. After that, I will construct a jigsaw puzzle of the virtual arena and will fill out several questionnaires.

#### **Risks**

Participation in this study may involve some risks or discomforts. These may include the following:

There are no known negative effects from exposure to magnetic fields. However, the imager makes a loud, banging noise while it is taking pictures. I will be wearing special

headphones to help decrease the noise. Some people undergoing this examination become anxious about being in a small, enclosed space. If this happens to me, I can stop the procedure at any time by pressing a button that will be placed in my hand.

If I have any metal clips or plates in my body, or a pacemaker, or wear braces, I should tell the investigator about it. I should also tell the investigator if I am pregnant or suspect that I may be pregnant. MRI may not be appropriate under some of these conditions.

### **Benefits**

I do not expect any direct benefit to me from this procedure.

### **Participation costs and subject compensation**

The experiment will cost approximately 90 minutes of my time. If I am a student from the Psychology department subject pool, I will receive 3 credits if I have completed any part of the experiment. If I am not a student from the Psychology department subject pool, I will not be compensated for my participation.

### **Confidentiality**

Research records will be kept confidential to the extent provided by the law. All personal identifying information that includes diagnosis and/or medical status will be kept in a locked cabinet where access can be strictly controlled. Other research records will be numerically coded to remove any identifying information. My name will never be directly associated with my test results or my MRI pictures. Only the investigators in this project and persons directly employed in the laboratory will have access to this data.

### **Liability**

I understand that side effects or harm are possible in any research program despite the use of high standards of care and could occur through no fault of mine or the investigator involved. Known side effects have been described in this consent form. However, unforeseeable harm also may occur and require care. I understand that money for research-related side effects or harm, or for wages or time lost, is not available. I do not give up any of my legal rights by signing this form. Necessary emergency medical care will be provided without cost. I can obtain further information from W. Jake Jacobs, Ph.D., at (520) 626-4825. If I have questions concerning my rights as a research subject, I may call the Human Subjects Committee office, at the University of Arizona at (520) 626-6721.

### **AUTHORIZATION**

BEFORE GIVING MY CONSENT BY SIGNING THIS FORM, I AGREE THAT THE METHODS, INCONVENIENCES, RISKS AND BENEFITS HAVE BEEN EXPLAINED TO ME AND MY QUESTIONS HAVE BEEN ANSWERED. I UNDERSTAND THAT I MAY ASK QUESTIONS AT ANY TIME AND THAT I AM FREE TO WITHDRAW FROM THE PROJECT AT ANY TIME WITHOUT CAUSING BAD FEELINGS. MY PARTICIPATION IN THIS PROJECT MAY BE ENDED BY THE INVESTIGATOR OR BY THE SPONSOR FOR REASONS THAT WOULD BE EXPLAINED. NEW INFORMATION DEVELOPED DURING THE COURSE OF

THIS STUDY THAT MAY AFFECT MY WILLINGNESS TO CONTINUE IN THIS RESEARCH PROJECT WILL BE GIVEN TO ME AS IT BECOMES AVAILABLE. I UNDERSTAND THAT THIS CONSENT FORM WILL BE FILED IN AN AREA DESIGNATED BY THE HUMAN SUBJECTS COMMITTEE AT THE UNIVERSITY OF ARIZONA WITH ACCESS RESTRICTED TO THE PRINCIPAL INVESTIGATOR, W. JAKE JACOBS, PH.D., OR AUTHORIZED REPRESENTATIVE OF THE PSYCHOLOGY DEPARTMENT. I UNDERSTAND THAT I DO NOT GIVE UP ANY OF MY LEGAL RIGHTS BY SIGNING THIS FORM. A COPY OF THIS SIGNED CONSENT FORM WILL BE GIVEN TO ME.

\_\_\_\_\_  
Subject's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Legal Guardian (if necessary)

\_\_\_\_\_  
Date

Investigator's Affidavit

I have carefully explained to the subject the nature of the above project. I hereby certify that to the best of my knowledge the person who is signing this consent form understands clearly the nature, demands, benefits, and risks involved in his/her participation and his/her signature is legally valid. A medical problem or language or educational barrier has not precluded this understanding.

\_\_\_\_\_  
Investigator's Signature

\_\_\_\_\_  
Date