# UNIVERSITY OF IOWA INSTITUTIONAL REVIEW BOARD CLAREMONT MCKENNA COLLEGE INSTITUTIONAL REVIEW BOARD SCRIPPS COLLEGE INSTITUTIONAL REVIEW BOARD

**Project Title:** Embodied Attention: Attentional Guidance by Body Position

Principal Investigator: Catherine L. Reed, Ph.D., Shaun Vecera, Ph.D., & Toby Mordkoff, Ph.D.

**Project Description.** You are being asked to take part in a research study to show what parts of the brain are important in making decisions about various kinds of objects and sounds. You are invited because you are a healthy individual who is over the age of 18. The results from healthy individuals will be compared to the results of people who have problems with processing information about objects and sounds. Researchers hope to learn more about how the brain combines information from different senses so that people can recognize objects. If you do this research study, the researchers will ask you to pay attention to selected objects and to make certain decisions about them. For instance, you might distinguish between two objects by touch, by vision, or by hearing. You might also be asked to recognize these objects and name them. While you do that, they will take images of your brain to see what parts of the brain are working. They can take images of your brain with a machine called an EEG instrument. EEG stands for electroencephalography. Up to 40 healthy individuals will be asked to participate in each part of the study.

Procedures. If you agree to participate in this study, these things will happen. You will hear about the experiment procedure and sign a consent form. A researcher will prepare you to put the electrode cap on your head. The electrode cap has sensors record the electrical activity from the neurons just under your scalp. Once the cap is in place, you will be either shown some pictures of objects, hear sounds made by various objects, or feel objects; you will be asked to recognize or localize these objects. These items will be presented using a specially designed projection system, in ear phones, or via objects or patterns presented to your hand. Responses will be made using a response pad. These tasks will require you to make simple YES/NO decisions, or identify an item by a particular attribute (for example: color, pattern, texture, pitch). These are basic tasks designed to produce predictable patterns of activity in your brain. While you recognize the objects, the machine will take pictures of your brain. Experiments last about 50-60 minutes. You will be able to communicate with the researchers throughout the experiment. There will be some rest periods while you are in it. After the experiment you will be asked about the various objects that you saw, felt or heard.

#### These steps describe the basic experimental procedure in more detail:

You will be told about the EEG procedure and the researchers' object-processing test and will sign a consent form. If you are asked to be videotaped, you can agree or disagree at this point.

Then you will sit, very still, inside the EEG room and for about 35-45 minutes you will do the object-processing test while sitting very still. You will be in the EEG room for about 45-50 minutes total.

You will be able to talk with the researcher during breaks in the experiment. If you feel that you must get out of the room during the experiment, you can tell or signal the researcher to take you out.

When you come out of the scanner you will be asked about how you performed the object-processing tasks. No results of this research will be used to make any clinical decisions about you or anyone else.

## Discomforts or Risks

The researchers do not know of any risk to your body from the EEG machine's operation, but the study may include risks that are unknown at this time.

You might get tired or bored from the questions or the test in the tube.

Possible discomforts you may feel during the experiment include feeling tense or nervous from being in the EEG room, and sitting in the same position for about 50 minutes.

#### **Benefits**

There are no benefits associated with your participation in this study other than the experiment participation credit, extra credit, or payment mentioned below.

This study is designed for the researcher to learn more about brain function. This study is not designed to treat any illness or to improve your health. But if your brain pictures show any possible health problems the researchers will tell so that you can see your doctor. Of course, you would then be responsible for the costs of that medical care. Also there are risks as mentioned in the Discomforts and Risk Section. If you want to know the results of the study, the researchers can send you a copy of any published report or they can discuss the results at the end of the study. To do this, you will need to give an address or telephone number.

## **Study Sponsor**

This research is funded by NSF.

#### Cost to Subject

Funding for this study is provided by NSF and Dr. Catherine Reed. It will not cost you anything.

#### **Subject Payment**

You will receive extra credit, experiment credit or you will be paid \$5/0.5 hour for participation in this study. If you have been recruited through the subject pool at the University of Iowa or the Claremont Colleges, you will receive either extra credit or experiment credit only. If you are recruited from Scripps College or from the community, then you will be paid for your participation.

## Study Withdrawal

Taking part in this study is voluntary. You have the right to choose not to take part in this study. If you do not take part in the study, you will not lose any benefits or medical care to which you are entitled.

If you choose to take part, you have the right to stop at any time. If there are any new findings during the study that may affect whether you want to continue to take part, you will be told about them.

The study experimenter may decide to stop your participation without your permission, if he or she thinks that being in the study may cause you harm, or for any other reason.

#### **Invitation for Questions**

The researchers carrying out this study are Dr. Catherine Reed, Dr. Shaun Vecera, & Dr. Toby Mordkoff. You may ask any questions you have now. If you have questions later, you may call Dr. Reed at (909) 607-0740. If you are in Claremont, CA and have questions regarding yrou rights as a research subject, you may also direct questions to one of two people: 1) Anthony Fucaloro, the Chair of Claremont McKenna College's Institutional Review Board, an independent advisory group interested in the opinions and welfare of research participants. Anthony Fucaloro can be contacted by phone at (909) 607-1273, or via email, at <a href="mailto:afucaloro@kecksci.claremontmckenna.edu">afucaloro@kecksci.claremontmckenna.edu</a>. Or 2) Linda Scott, IRB Administrative Officer, who may be contacted via email at <a href="mailto:lscott@scrippscollege.edu">lscott@scrippscollege.edu</a>.

#### Confidentiality

The researchers hold all of your information in the strictest confidence. Your name will not appear on the forms or scans. Your answers and the brain imaging information will be identified by a code number and not by your name. To keep everything secret the information is kept under lock and key and the researchers' computers are protected by passwords and burglar alarms. That way you cannot be identified and the information given will be kept confidential. Your physician/investigator will treat your identity with professional standards of confidentiality. The information obtained in this research study may be published in medical journals, but your identity will not be revealed.

We will try to keep your research records confidential, but it cannot be guaranteed. Records that identify you (including your medical records) and the consent form signed by you, may be looked at by the following people:

Federal agencies that oversee human subject research

Scripps College Institutional Review Board

University of Iowa Review Board

The investigator and research team for this study

The sponsor or an agent for the sponsor

Regulatory officials from the institution where the research is being conducted, to ensure compliance with policies or monitor the safety of the study

The results of this research may be presented at meetings or in published articles. However, your name will be kept private. You will also be asked to sign a separate authorization form. This form will explain who will have access to your protected health information.

Some things we cannot keep private. If you give us any information about child abuse or neglect we have to report that to Social Services. If you tell us you are going to physically hurt someone, we have to report that to the police. Also, if we get a court order or subpoena to turn over your study records, we will have to do that.

# Injury and Compensation

If you have questions about injury related to the research, you may call <u>Dr. Catherine L. Reed at (909) 607-0740</u>. <u>Dr. Reed</u> should be informed about any injury you experience while you take part in this study. If you are hurt by this research, we will provide medical care if you want it, but you will have to pay for the care that is needed. We may also call Campus Security or 911 for emergency care.

If you require counseling services and are a student at the Claremont Colleges, the Claremont counseling service is Monsour Counseling and Psychological Services, 757 College Way, Claremont, CA 91711, 909-621-8202 (emergency number AFTER HOURS: 621-2000, ask for the on-call counselor). For off campus populations, please contact the "Find a Counselor" service from the American Psychological Association: <a href="https://locator.apa.org">https://locator.apa.org</a>

## **AUTHORIZATION:**

## STATEMENT OF CONSENT AND AGREEMENT

I, \_\_\_\_\_\_ grant my permission to participate in the research described above and related incidental procedures. The nature and purpose of this research and the possible material or significant benefits and risks have been explained to me so that I understand them.

I also AGREE DISAGREE (circle one) to be videotaped for research purposes only.

I am granting my participation without duress or coercion in exchange for expected benefits for me or for others. I understand that I may withdraw my consent at any time I wish without penalty or prejudice and may stop participating as soon thereafter as it is safe to do so. If I am being paid for my participation in this research, I may collect my entire fee at any time I choose to withdraw from the research.

If I am not satisfied with my participation, I will immediately inform the heads of the IRBs, either Dr. Anthony Fucaloro, Linda Scott (contact information listed above). I acknowledge that no guarantee or assurance has been made as to the results of my participation.

If I want any additional information, have any questions, or have any reservations I may now mention them to the people present or write them in the space below:

All matters and issues mentioned above have been discussed to my satisfaction and agreement. My signature indicates that I have read and understood all of the above. I have asked for and received a satisfactory explanation of

any language that I did not fully understand. By signing this form, I agree to participate in this study and I understand that I may withdraw at any time. I affirm that I am over the age of 18. I also consent to publication of any information for scientific purposes so long as my identity will not be revealed. I understand there are two exceptions to the promise of confidentiality. If information is revealed concerning suicide, homicide or child abuse and neglect, it is required by law that this be reported to the proper authorities. In addition, should any information contained in this study become the subject of a court order or lawful subpoena, the Claremont McKenna College might not be able to avoid compliance with the order or subpoena. I have received a copy of the consent form.

	_ (Signature of the research participant)
	(Signature of the research director or the signature, printed
name, and address of an authorized agent of the r	research director)

For further information or questions about this study contact: Catherine L. Reed, PhD Department of Psychology, Claremont McKenna College 850 Columbia Ave. Claremont, CA 91711

Phone: (909) 607-0740 Email: <u>clreed@cmc.edu</u>