

# **37946-consent-adult.md**

## **Informed Consent Form for Biomedical Research**

### **The Pennsylvania State University**

**Title of Project: The Development and Dynamics of Cortical**

#### **Motion Processing**

##### **Principal Investigator:**

Rick O. Gilmore, Ph.D. Associate Professor of Psychology The Pennsylvania State University  
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#### **1. Purpose of the study:**

The purpose of this research is to study how the brain responds to visual information and how brain responses to visual information differ among infants, children, and adults.

#### **2. Procedures to be followed:**

We may record images of your face on video or digital camera during or after the study. In some cases, we will ask you to complete a set of simple vision screening tests in which we ask you to tell us what you see or do not see.

If we plan to collect brain activity data, we will measure the size of your head, and then attach a set of detectors to it. The detectors are either small metal cups or sponges connected to wires. They are like a set of antennas that collect the weak electrical signals everyone's brain naturally gives off. We will either put on a small number of detectors (3-7) individually, or a special cap that has 128 of them that can be connected all at once. Before we put on the detectors, we may need to clean your scalp with a special paste that that can irritate the skin slightly. We will then ask you to sit in a special chair and watch a series of images on a computer monitor. We will record your brain activity while you watch the computer monitor. The displays take about 10 seconds each, and there will be 100 to 200 displays to watch in total. The displays will consist of black and white stripes that flash on and off or differ between the two eyes; dots that move in different directions; and other similar, simple visual patterns. We will take short breaks between the displays, and a longer break about half-way through. When we have finished, we will take the detectors off and help you clean your scalp.

If we do not plan to collect brain activity data, we will show you similar displays, but ask you to

make judgments about whether you can or cannot see different aspects of the displays. You will indicate your choices by pressing buttons on a keyboard or mouse. For example, you might be presented with a separate image to each eye on a computer monitor. This will cause your perception to “switch” in between the two images. Your task in this case would be to press the key on the keyboard that corresponds with whichever image you perceive.

### **3. Discomforts and risks:**

If we collect brain activity, you may experience some mild skin irritation from the skin cleaner, electrode paste or solution, or from the electrodes themselves. You may also experience mild boredom from the displays.

There is a possibility if you are photosensitive or have an abnormal brain response to light or patterns that you could experience a seizure. Scientists estimate that among 5-24 year-olds, 1 person in 4,000 is susceptible to this sort of seizure. The risk is higher for people with epilepsy or with a family history of seizures induced by flashing lights or visual patterns. But, a seizure caused by light or patterns does not increase the chance of subsequent epilepsy. International guidelines have been developed for visual displays in order to reduce the chance of a person developing a seizure following television or video-game play. We follow these guidelines as much as possible. If you experience any blanking out or loss of consciousness, involuntary jerking or twitching, or any other negative symptom during the study, alert us and we will stop immediately.

You should also know that the risks involved in this study are the same as those experienced in everyday life while watching TV, movies, videos, or riding in a car.

### **4. Benefits:**

The benefits to you include more knowledge about the brain and visual processing. The benefits to society include a better understanding of how the visual portions of the brain develop and change.

### **5. Duration/time of the procedures and study:**

A single visit to the lab will take about 1 hour. We may ask you to return for one or more additional visits. The additional visits will take the same amount of time or possibly less.

### **6. Alternative procedures that could be utilized:**

There is no alternative procedure that could be utilized in this study.

### **7. Statement of confidentiality:**

Your participation in this research is confidential. To make sure that your participation is confidential, your data will be identified by a code number, and only the person(s) in charge will

have access to the materials that link your name to your code. Data will be kept on computers that are controlled by a password and are located in a locked laboratory in 120 Chandlee Building.

Data will be kept indefinitely in a secure digital library.

Any photographs taken will be stored on a digital camera. Videos will either be recorded directly onto the computer that is collecting brain activity or on videotape. Only approved laboratory staff will have access to the recordings or photographs. Recordings and photographs will be labeled by code number or the date and time of the recording. The computer files and tapes will be marked with a code number or date, and will be stored on a computer located in a locked research laboratory room in 120 Chandlee Building.

Recordings and photographs will be kept indefinitely in a secure digital library.

The Office of Human Research Protections in the U.S. Department of Health and Human Services, The Penn State University Office for Research Protections, and The Penn State University Institutional Review Board (IRB) may review records related to this project.

## **8. Right to ask questions:**

You can ask questions about this research. Contact Dr. Rick Gilmore at (814) 865-3664 with questions, complaints, or concerns about the research. You can also call this number if you feel this study has harmed you. If you have questions, concerns, or problems about your rights as a research participant, please contact The Pennsylvania State University's Office for Research Protections (ORP) at (814) 865-1775. The ORP cannot answer questions about research procedures. Questions about research procedures can be answered by the research team.

## **9. Payment for participation.**

You will receive \$10 for one hour of research participation, or if applicable, course credit as specified in the syllabus provided by your instructor. Alternative means for earning this course credit are available as specified in the syllabus.

## **10. Voluntary participation:**

Your decision to be in this research is voluntary. You can stop at any time. You do not have to answer any questions you do not want to answer. Refusal to take part in or withdrawing from this study will involve no penalty or loss of benefits you would receive otherwise.

## **12. Injury Clause:**

In the unlikely event you become injured as a result of your participation in this study, medical care is available but neither financial compensation nor free medical treatment is provided. By signing this document, you are not waiving any rights that you have against The Pennsylvania State University for injury resulting from negligence of the University or its investigators. In the

event of an injury, you may contact Dr. Rick Gilmore, the project's principal investigator (865-3664; rogilmore@psu.edu).

### **13. Abnormal Test Results:**

In the event that abnormal test results are obtained, you will be made aware of the results immediately. It would then be recommended that you contact your private medical provider for follow-up.

You must be 18 years of age or older to take part in this research study. If you agree to take part in this research study and the information outlined above, please sign your name and indicate the date below.

You will be given a copy of this signed and dated consent for your records.

Participant Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Person Obtaining Consent: \_\_\_\_\_

Date: \_\_\_\_\_