

# Study Information Brochure

<b>Experiment</b>	Seeing with the Skin
<b>Lead Researcher</b>	Katja Sangati
<b>Experimenter(s)</b>	Katja Sangati
<b>Equipment used in the experiment</b>	Enactive Torch, Torobo robot arm, EMG, ECG

Dear Participant,

Thank you for agreeing to participate in this study! Before you begin, it is important that you learn about the procedures involved. Please read the following carefully.

## Our goals

The aim of this project is to investigate perception when using a device that is designed to provide information of one sense (vision) using another sense (touch). According to the nature of psychological research, we cannot describe at this moment our specific research questions and hypotheses. You will be debriefed, however, once you have completed the experiment.

## Instructions and procedures

You will be given a new tool called Enactive Torch, a hand-held device that produces vibrations on the skin of your hand when you are pointing it at a near object. You will have a chance to explore different objects either blindfolded or sitting behind a curtain and thus without being able to perceive them with your vision. You will first play a whack-a-mole game and then perform a task that consists in distinguishing object shapes and sizes. During the experiment, sometimes we will ask you to directly hold the device in your hand and other times we will ask you to interact with a robot arm to explore objects. We will register your reports about perception of objects, your muscular activity, and your heartbeat.

You will see more detailed instructions on the computer screen once you begin the experiment and there will be a series of practice trials so you can familiarize yourself with the experimental interface.

## Time involvement

The experiment takes approximately 90 minutes.

## Risks and benefits

The study poses no risk to your health or safety. Beyond the compensation that you will receive (¥1500 in Amazon gift card), there are no benefits to participation.

## Further explanations

General information about the experimental policies adopted by our Unit and the equipment used in our studies can be found on our website: <https://groups.oist.jp/ecsulab/participate>

If you would like to obtain further information about this study, you can contact Katja Sangati at [ekaterina.sangati@oist.jp](mailto:ekaterina.sangati@oist.jp).

If you have any complaints about this study, you can contact Principal Investigator Prof. Tom Froese at [tom.froese@oist.jp](mailto:tom.froese@oist.jp) or ECSU Lab Coordinator Ms. Kaori Yamashiro at [kaori.yamashiro@oist.jp](mailto:kaori.yamashiro@oist.jp).