

The University Of Texas Magnetic Resonance Imaging Center  
(CPHS# HSC-MS-05-0516)

### Informed Consent for Research Study

*Functional Magnetic Resonance Imaging of Multisensory Integration & Multisensory Influences On Touch Perception--fMRI, MEG and TMS Studies & Rapid Sensory Processing in Well and Poorly Compensated Young Adults with Dyslexia & fMRI of Functional Brain Organization in Stroke Recovery and Epilepsy*

Principal Investigator: Michael S. Beauchamp, Ph.D.

You are being invited to take part in a research project called, "Functional Magnetic Resonance Imaging of Multisensory Integration & Multisensory Influences On Touch Perception--fMRI, MEG and TMS Studies & Rapid Sensory Processing in Well and Poorly Compensated Young Adults with Dyslexia & fMRI of Functional Brain Organization in Stroke Recovery and Epilepsy" conducted by Dr. Michael Beauchamp. Your decision to take part is voluntary and you may refuse to take part, or choose to stop taking part, at any time. A decision not to take part or to stop to take part being a part of the research project will not change the services that are available to you from UT Physicians or affect your future care. It will also not affect your grades or employment. You may refuse to answer any questions asked or written on any forms. This research project has been reviewed by the Committee for the Protection of Human Subjects (CPHS) of the University of Texas Health Science Center at Houston as Protocol Number: HSC-MS-05-0516. Dr. Beauchamp will be glad to answer any questions regarding the study at any time (713-500-5978).

Taking part in these studies may require one to three visits. Some of these visits may include written or computerized behavioral tests, or tests of brain function, including functional magnetic resonance imaging (fMRI), magnetoencephalography (MEG), and transcranial magnetic stimulation (TMS).

fMRI is very similar to magnetic resonance imaging procedures (MRI) that you may already be familiar with. In both MRI and fMRI, subjects lay inside an MR scanner and images of their brain are collected (no needles or injections are required). The only difference between the two is that in regular MRI, subjects may rest with their eyes closed. In fMRI, subjects must stay awake and look at pictures or listen to sounds. If your test involves fMRI, you will be asked to lie inside the MRI scanner for between half an hour and one and a half hours (you may get out of the scanner at any time).

MEG is a magnetic brainwave test that takes place in a quiet room. For this test two small ear pieces will be placed in your ears, three small electrodes will be placed on your forehead and your head will be placed inside a large helmet style-magnetic sensor. Recordings will be made while you are lying on your back or while sitting up. You will be asked to lie quietly on the exam table for between half an hour and two hours; you may get out of the scanner at any time.

TMS is a magnetic stimulation test that takes place while sitting or lying in a comfortable chair. In this method, a coil will be placed near your head and used to create a magnetic field.

This magnetic field will alter neural activity in a small portion of your brain for a few seconds. You may feel a small muscle twitch when the magnetic field is applied.

These tests will be performed to help understand how the human brain processes information. Although of no direct clinical benefit to you, your taking part in this study should help us to better understand the brain regions involved in different types of mental abilities. Your decision to take part is strictly voluntary and you may refuse to take part, or to stop being in the study at any time. No costs are involved to you, and you will be paid for your inconvenience. Because these are ongoing experiments, you may be asked to return for additional scan sessions but you do not have to. For your inconvenience, you will be paid \$10 for each behavioral experiment in which you take part, \$40 for each MRI session in which you participate, \$40 for each MEG scanning session in which you participate, and \$10 for each TMS experiment in which you participate.

Patients with cardiac pacemakers, intracranial aneurysm clips, or other implanted metallic devices may not take part in MRI experiments. Welders and other metal workers may be at risk for eye injury because of small metal fragments in the eye, of which they might not be aware. Some patients may experience fear of closed spaces (claustrophobia) for a short time while in the MRI scanner. You will wear a set of ear plugs to reduce the noise and increase your comfort during scanning. If it is difficult for you to tolerate the confinement within the scanner or the noise you will be taken out immediately. None of the experiments require needles or injections (they are non-invasive). Current experience shows that there are no risks or adverse effects from the magnetic fields used in this study; any risks that do exist are similar to those of talking on a cell-phone. However, as a precaution, you should not take part in the study if you are or intend to become pregnant.

You will not be personally identified in any reports or publications that may result from this study. Any personal information about you that is gathered during this study will remain confidential to every extent of the law. A special number (or code) will be used to identify you in the study and only the investigator will know your name. No protected health information will be used or disclosed in the course of this study.

If you suffer any injury as a result of taking part in this research study, please understand that nothing has been arranged to provide free treatment of the injury or any other type of payment. The study is not designed to detect any kind of illness or disorder. However, all needed facilities, emergency treatment and professional services of the Medical Center will be available to you, just as they are to the community in general. You should report any injury to Dr. Michael Beauchamp, at (713)500-5978 and to the Committee for the Protection of Human Subjects at (713) 500-7943. You will not give up any of your legal rights by signing this consent form.

Taking part in this study is your choice. If you sign this form it means that you wish to take part in this research study. Sign below only if you understand the information given to you about the research and choose to take part. Make sure that any questions have been answered and that you understand the study. If you have any questions or concerns about your rights as a research subject, call the Committee for the Protection of Human Subjects at (713)500-7943. If you decide to take part in this research study, a copy of this signed consent form will be given to you.

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Printed Name of Subject

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Signature of Subject

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Date/Time

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Printed Name of Individual Obtaining Consent

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Signature of Individual Obtaining Consent

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Date/Time

This study (HSC-MS-05-0516) has been reviewed by the Committee for the Protection of Human Subjects (CPHS) of the University of Texas Health Science Center at Houston. For any questions about research subject's rights, or to report a research-related injury, call the CPHS at (713) 500-7943.