UNIVERSITY OF CALIFORNIA, SAN FRANCISCO
CONSENT TO PARTICIPATE IN A RESEARCH STUDY

Epileptic Encephalopathies: Clinical and Genetic Predictors of Outcomes and Therapeutic Insights

This is a research study. The study doctor Elliott H. Sherr, M.D., Ph.D. from the Department of Neurology and/or a research coordinator will explain this study to you.

Research studies include only people who choose to take part. Please take your time to make your decision about participating in this study, and discuss your decision with your family or friends if you wish. If you have any questions, you may ask the researchers.

You are being asked to take part in this study because:

1. You are currently participating in a research study being conducted by Dr. Elliott H. Sherr and his colleagues to learn about epileptic encephalopathies.

2. You have already signed the main consent form and have indicated your participation in the main research study. You are now being asked to provide consent for a skin biopsy procedure.

Why is this study being done?

Dr. Sherr and his colleagues at UCSF conduct clinical research seeking to advance the understanding of infantile spasms and other epileptic encephalopathies. The tissue obtained from your skin will allow the researchers to use additional approaches to discover genetic causes of epileptic disorders. Participation in this study is completely voluntary. The test is safe and can be performed using local anesthetic. The individual with an epileptic disorder will be invited to participate in the skin biopsy study. Only those subjects who participate in the main study are eligible to participate in the skin biopsy portion of the study.

Another goal of this study is to convert skin cells from patients with epileptic disorders into other cell types that can be studied in the laboratory. To achieve this we will convert cells from the skin or hair into induced pluripotent progenitor (iPS) cells. A pluripotent cell can create all other kinds of cell types. iPS cells are a type of pluripotent stem cell that is artificially derived by introducing specific genes into cells. We will grow these pluripotent stem cells into other types of cells, such as neurons, similar to those that make up other tissues in the body. We hope that these studies will help us identify what is different in the cells of patients in this study.

Please read the information below and ask questions about anything that you do not understand before deciding if you want to participate. The researchers will be available to answer your questions. In order to decide whether or not you want to be part of this research study, you should know enough about its risks and benefits to make an informed judgment.
This consent form gives detailed information about the skin biopsy that will be discussed with you. You will be asked to sign this form if you wish to participate.

**How many people will take part in this study?**

Approximately 20 participants will be involved with this component of the study.

**What will happen if I take part in this research study?**

If you agree to be in this study, the following will happen:

1. A member of the research team will perform the skin biopsy on you. This involves taking a small piece of skin from your forearm, thigh or lower back. A numbing cream will be placed on the skin biopsy site. After the skin is numb, the site will be cleansed with an antiseptic solution and an additional, injectable numbing medication will be given. The injection may sting a little, but the numbing cream should lessen the burning sensation. Once the skin is completely numb, a 2 millimeter piece of skin (about the size of a pencil-end eraser), will be removed. The biopsy site may be closed with a stitch. You will be provided with instructions on the care of the skin biopsy site.

2. You may decide to provide a hair sample if you do not wish to undergo a skin biopsy.

3. The sample will be placed in a specimen bag and delivered to our lab at UCSF. The skin and/or hair sample will be cultured (which means the skin cells are fed with nutrients in the lab to grow a certain type of cell called fibroblast cells). This lets us have a large supply of cells that can be used for research. The cultured cells will allow us to do specialized chromosome tests. In addition, these cells will be induced to differentiate into pluripotent stem cells as explain above. All cells will be stored at the lab with your consent and will be available for Dr. Sherr for his research. All identifiable information that will be collected about you will be removed from the sample and replaced with a code.

**How long will I be in the study?**

The research activities outlined above can be completed in 1 visit. The total time required is not expected to exceed 2 hours.

**Can I stop being in the study?**

If you first agree to participate and then change your mind, you are free to withdraw from the study and discontinue your participation at any time. If you choose to tell the researchers why you are leaving the study, your reasons for leaving may be kept as part of the study record. Your decision will not affect your ability to receive medical care and you will not lose any benefits to which you would otherwise be entitled. Also, the investigators or other member of the research team may stop you from taking part in this study at any time if he or she believesit
is in your best interest, if you do not follow the study rules, or if the study is stopped. You may at any time contact the researchers at 415-502-8039 and ask that your samples be withdrawn from research use, and any identifiable samples still in their possession will be destroyed.

**What risks can I expect from being in the study?**

There are some risks associated with a 2 mm skin biopsy. The medication that numbs your skin may sting or burn while it is being injected, and there is also a small risk of an allergic reaction. The biopsy site will bleed and leave a scar and there is a small risk of infection. Measures will be taken to minimize these risks.

For more information about risks, ask one of the investigators or research coordinators.

**Are there benefits to taking part in the study?**

There will be no direct benefit to you from participating in this study. However, the information that you provide may help health professionals better understand epileptic encephalopathies such as infantile spasms and may support the development of novel therapeutic strategies.

There is a reasonable possibility that no findings will result from this research effort. Any significant findings that do result may take months or years to complete. If you wish to inquire into the progress of our research, you are welcome to do so at any time.

**What other choices do I have if I do not take part in this study?**

You are free to choose not to participate in the study. If you decide not to take part in this study, there will be no penalty to you. You will not lose any of your regular benefits, and you can still get care from our institution the way you usually do.

**Will my medical information be kept private?**

We will do our best to protect the information we collect from you and your medical record. Information which identifies you will be kept secure and restricted. However, your personal information may be given out if required by law. If information from this study is published or presented at scientific meetings, your name and other identifiers will not be used. Information which identifies you will be destroyed when this research is complete. The following organizations may look at information about you or in your medical and research record:

- UCSF’s Committee on Human Research
- Government agencies involved in keeping research safe for people, such as the Food and Drug Administration (FDA).

Sensitive research information: Participation in research may involve a loss of privacy, but information about you will be handled as confidentially as possible. There is a risk that information about taking part in a study about ASD may influence insurance companies and/or
employers regarding your health. However, no information obtained in this study will be placed in your medical records nor will it be provided to any insurance entity or place of employment, except in the situation described as follows: your participation in this study may be noted in your medical record at UCSF. If you do not already have a medical record at UCSF, one will be created for you, since you will be completing some or all of the research activities associated with this study at UCSF’s medical center. Your consent forms, documentation of the blood draw procedure, and/or results of the neuropsychological assessments may be included in this record. Other doctors at UCSF may become aware of your participation. However, hospital regulations require that all health care providers treat information in medical records confidentially.

**What are the costs of taking part in this study?**

All procedures related to the skin biopsy will be provided at no cost to you.

**Will I be paid for taking part in this study?**

You will not be paid for participation in this study.

**What happens if I am injured because of taking part in this study?**

It is important that you tell Dr. Sherr if you feel that you have been injured because of taking part in this study. You can tell the doctor in person or call (415) 502-8039.

**Treatment and Compensation for Injury:** If you are injured as a result of being in this study, treatment will be available. The costs of the treatment may be covered by the University of California, depending on a number of factors. The University does not normally provide any other form of compensation for injury. For further information about this, you may call the office of the Committee on Human Research at 415-476-1814.

**What are my rights if I take part in this study?**

Taking part in this study is your choice. You may choose to take part or not to take part in the study. If you decide to take part in this study, you are free to leave the study at any time. No matter what decision you make, there will be no penalty to you and you will not lose any of your regular benefits. Leaving the study will not affect your medical care. You can still get medical care from our institution. We will tell you about new information or changes in the study that may affect your willingness to continue in the study. In the case of injury resulting from this study, you will not lose any of your legal rights to seek payment by signing this form.

**Who can answer my questions about the study?**
You can talk to the researchers about any questions, concerns, or complaints you have about this study by calling the research staff or Dr. Sherr at (415) 502-8039.

If you wish to ask questions about the study or your rights as a research participant to someone other than the researchers or if you wish to voice any problems or concerns you may have about the study, please call the Office of the Committee on Human Research at 415-476-1814.

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Optional: Use of Tissue for Research

About Using Tissue for Research

As part of your participation in this research, a tissue sample (skin) will be collected. We would like to keep some of the tissue that is leftover for future research. If you agree, the tissue specimen(s) will be kept in storage in what is called a “tissue bank.” Dr. Sherr’s tissue bank at UCSF will house tissue specimens collected for the purposes of this research study.

We do not know for sure if your tissue specimen(s) or information will be used, but they might be used in research about neurological, psychiatric and behavioral disorders. Your specimen(s) and any information about you will be kept until it is used up or destroyed. If you decide later that you do not want your tissue specimen(s) and information to be used for future research, you can notify the investigator and/or a member of the research team by calling (415) 502-8039 and/or in writing, and any remaining identifiable tissue specimen(s) and information will be destroyed if they are no longer needed for your care. All written requests should be directed to Elliott Sherr, M.D., Ph.D. at 675 Nelson Rising Lane, Box 3206, San Francisco, CA 94158. However, if any research has already been done using portions of your tissue specimen(s), the data will be kept and analyzed as part of those research studies. Reports about research done with your tissue will not be given to you or your doctor. These reports will not be put in your health record. The research will not have an effect on your care.

Things to Think About

- The choice to let us keep the leftover tissue specimen(s) for future research is up to you. No matter what you decide to do, it will not affect your care.
- If you decide now that your tissue specimen(s) can be kept for research, you can change your mind at any time. Just contact us and let us know that you do not want us to use your tissue. Then any tissue that remains will no longer be used for research.
- Sometimes tissue specimens are used for genetic research (about diseases that are passed on in families). Even if we use your tissue for genetic research, we will not put the results in your medical record.
• We may give your tissue specimen(s) and certain medical information about you (for example, diagnosis, age, developmental history, etc.) to other scientists or companies not at UCSF, including a government health research database, but we will not give them your name, address, phone number, or any other information that would identify you. Reports about any research will not be given to you or your doctor.
• You will not be charged for donating your child’s tissue specimen(s). Your samples or data may be used to develop new products, tests or discoveries. In some instances, these may have potential commercial value. You will not receive any payment or financial benefit from any products, tests or discoveries.
• Your personal health information cannot and will not be used for additional research without additional approval from either you or a review committee.

Benefits

There is no direct benefit to you for donating your tissue specimen(s) and agreeing to have your tissue specimen(s) stored and potentially used for research. However, the benefits of research using tissue include learning more about what causes neurological, psychiatric and behavioral disorders and other diseases, how to prevent them, and how to treat them.

The greatest risk to you is the release of information from your health records. We will do our best to make sure that your personal information will be kept private. The chance that this information will be given to someone else is very small.

Making Your Choice

Please read each sentence below and think about your choice. After reading each sentence, please initial either the "Yes" or "No" box. If you have any questions, please talk to your doctor or nurse, or call our research review board at 415-476-1814. No matter what you decide to do, it will not affect your child’s care.

<table>
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<tr>
<th>YES</th>
<th>NO</th>
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<tr>
<td>1. My tissue may be kept for use in research to learn about, prevent, or treat neurological, psychiatric and/or behavioral disorders.</td>
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<th>YES</th>
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<tr>
<td>2. My tissue may be kept for use in research to learn about, prevent or treat other health problems (for example: diabetes, Alzheimer’s disease, or heart disease).</td>
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CURE Epileptic Encephalopathies Skin Biopsy Consent Adult

Date: 5/29/2013
3. Someone may contact me in the future to ask me about whether or not I’m interested in taking part in more research.

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CONSENT

You have been given copies of this consent form and the Experimental Subject’s Bill of Rights to keep. You will be asked to sign a separate form authorizing access, use, creation, or disclosure of health information about you.

PARTICIPATION IN RESEARCH IS VOLUNTARY. You have the right to decline to participate or to withdraw at any point in this study without penalty or loss of benefits to which you are otherwise entitled.

If you wish to participate in this study, you should sign below.

Date ___________________ Participant’s Signature ___________________ Print Name ___________________

Date ___________________ Signature of Person Obtaining Consent ___________________ Print Name of Person Obtaining Consent ___________________

AND/OR:

Date ___________________ Signature of Legally Authorized Representative ___________________ Print Name of Legally Authorized Representative ___________________

Date ___________________ Signature of Person Obtaining Consent ___________________ Print Name of Person Obtaining Consent ___________________

SURROGATE DECISION MAKERS MUST ALSO COMPLETE A SELF-CERTIFICATION OF SURROGATE DECISION MAKERS FOR POTENTIAL SUBJECT’S PARTICIPATION IN UNIVERSITY OF CALIFORNIA RESEARCH

OR:
The person being considered for this study is unable to consent for himself/herself because he/she is a minor. By signing below, you are giving your permission for your child to be included in this study.

Date ____________________________  Signature of Parent or Legal Guardian ____________________________  Print Name of Parent or Legal Guardian ____________________________

Relationship to Minor ____________________________