CONSENT TO PARTICIPATE IN THE REGISTRY

Why am I being invited to take part in a registry?

We invite you to take part in this Registry because you are a carrier of a fragile X premutation or are a member of a family affected by fragile X. The purpose of this project is to develop a Registry of adults with the fragile X premutation and adults without the premutation who are interested in participating in future research, including treatment studies. The Registry is currently open to residents of the United States and to residents of countries outside of the United States. (If you are a resident of Europe, please see the European privacy section below. Also note that we are working on several language translations of all Registry material that will become available in the future.) Finally, if you are not a resident of the U.S. and have questions about international participation after reviewing this document, please contact Robby Miller (robby@fragilex.org).

What are my rights when providing electronic consent?

- You have the right to obtain a copy of the consent document in non-electronic format (hard copy).
- You have the right to provide consent in a non-electronic format.
- If you wish to withdraw your electronic consent, please tell the study team.
- This agreement for electronic consent applies only to your consent to participate in this Registry.

Who can I talk to?

If you have questions, concerns, or complaints, contact Glenda M Espinal at UC Davis (gmespinal@ucdavis.edu) or 916-703-0470, Hilary Rosselot at the National Fragile X Foundation (hilary@fragilex.org) or the Registry lead David Hessl, PhD at UC Davis (drhessl@ucdavis.edu or 916-703-0249).

This Registry plan has been reviewed by an Institutional Review Board (IRB). You may communicate with an IRB staff member at (916) 703-9151, hs-irbadmin@ucdavis.edu, or 2921 Stockton Blvd, Suite 1400, Room 1429, Sacramento, CA 95817 for any of the following reasons:

- Your questions, concerns, or complaints are not being answered by the Registry team.
- You cannot reach the Registry team.
- You want to talk to someone besides the Registry team.
- You have questions about your rights as a registrant.
- You want to get information or provide input about this Registry.

Why is this Registry being created?

The purpose is to establish and maintain an online research participation Registry for adults (men and women) with the fragile X premutation and family members who do not have a fragile X mutation. Premutation carriers who have been diagnosed with or have symptoms of fragile X - associated tremor/ataxia syndrome (FXTAS) or fragile X - associated primary ovarian insufficiency (FXPOI), as well as carriers without these problems are invited to participate. For research studies, it is always important to have a comparison group. That is why we encourage family members who do not carry a premutation to register along with premutation carriers.

As a registrant you will be asked to provide contact information, demographic information and basic medical information so that you can be invited to participate in future research projects focused on the understanding and treatment of fragile X premutation-associated conditions. There will be opportunities for you to provide additional more detailed information about your health if you are willing.

As treatments for premutation-associated conditions are developed, there will be a need to have a large and diverse group of people with the premutation to contact for participation in clinical trials and other kinds of studies to better understand how these conditions progress over time. To date, the majority of studies focused on the premutation have not adequately represented people from all ethnic groups. This Registry will help to promote diversity and inclusivity in future premutation research by including international registrants and through outreach activities by the Registry team. As a registrant you may be contacted by the registry team about research studies, you may be eligible to participate in, including future treatment studies. Registrants will not be directly contacted by the researchers. Registrants will be part of an international community interested in premutation research and will receive up-to-date information about research results.

How long will the Registry last?

We expect that you will be in this research Registry for many years, perhaps decades, as it grows over time. You will receive at least yearly updates about the Registry and developments in the field and reminders to update your Registry information.

How many people will be included in the Registry?

Eventually, we expect thousands of people will enroll in the Registry internationally.

What happens if I say yes, I want to be in this Registry?

If you choose to enroll in the Registry, you will be asked to enter information about yourself into a database. Eligible participants are able to submit their information to the secure database through a link located on the National Fragile X Foundation website. This link will take you to the secure, HIPAA-compliant data system hosted by UC Davis. (HIPAA, the U.S. Health Insurance Portability and Accountability Act is a federal law that required the creation of national standards to protect sensitive patient health information from being disclosed without the patient’s consent or knowledge.) The information you will be asked to enter includes your name and contact information, the name and contact information of someone else who may be able to help the team locate you (e.g., if you move and we cannot find you), demographic information such as your ethnicity, details of your fragile X DNA test results if available, and your interest in sharing biological samples (e.g., blood, saliva) in future research. You will be given the opportunity to provide details about symptoms you may be experiencing. You will notice that the Registry asks for sensitive information such as ethnicity, gender identity, and your health and genetic information. While it is not required that you provide these details, if you do, the information will be used to better describe the group of people in the Registry. We will be able to better match your potential eligibility for a research project with the information that you provide.

You will notice that the Registry asks for information such as city of birth, birth date, and your birth name. While it is not required that you provide these details, if you do, the information will be used to create a Global Unique Identifier (GUID) for you. A GUID (https://nda.nih.gov/s/guid/nda-guid.html) is a universal participant ID allowing researchers to share data specific to a study participant without exposing personally identifiable information and match participants across labs and research data repositories. We emphasize that all personally identifying information (e.g., name, date of birth, address, email) will be kept separate from the other data and will only be accessible to the Registry director and coordinator. It will not be shared.

Completing this Registry survey should take no longer than 15-20 minutes. If you have any difficulty entering yourinformation into the Registry, you will be able to contact Registry staff for assistance. You will be contacted yearly by email or phone to update your information as it changes over time.

Researchers will not be able to contact you directly. Rather, they will notify the Registry team, and then a committee of experts and fragile X family representatives will review the planned research and determine its appropriateness for registrant participation. After committee approval, the Registry team will send you details about the study and you can decide whether to contact the researchers. The Registry team may periodically update you by email or through social media on new studies that are beginning or ongoing that may interest you.

You may wish to know where the Registry data is stored. Data are managed and stored within the REDCap (Research Electronic Data Capture) system. REDCap servers are housed in a cloud data center at Amazon Web Services (AWS) and all web-based information transmission is encrypted (converted into a code to conceal the information). REDCap was developed specifically around HIPAA Security guidelines. REDCap currently supports 4402 institutions in 138 countries (www.project-redcap.org). The Biomedical Informatics program of the UC Davis Clinical and Translational Science Center is the central location for REDCap system management at UC Davis. UC Davis takes appropriate physical, administrative and technical measures to protect personal data that are consistent with applicable privacy and data security laws and regulations.

The Registry data may be transferred to alternative investigator(s)/institution(s) in the event the MIND Institute and/or NFXF is no longer able to serve in their roleas managers of the Registry. If transfer should occur, all Registry participants will be notified and given the option to remove their data from the Registry. Also, a data transfer agreement will be established to ensure adequate protection of the data during transmission, and once transferred, the original data hosted by UC Davis will be deleted.

What happens if I do *not* want to be in this Registry?

You may decide not to take part in the Registry, and it will not be held against you in any way. You will still be eligible to participate in research studies, including treatment studies. However, it may be more difficult for researchers to contact you.

What happens if I say yes, but I change my mind later?

You can leave the Registry at any time and it will not be held against you. If you decide to leave the Registry and withdraw, you will no longer be notified of research opportunities through the Registry. If you decide to leave the Registry, contact Glenda M Espinal at gmespinal@ucdavis.edu or 916-703-0470 and she can delete your information from the Registry database. You may request to have all your data deleted or only some of it.

Is there any way being in this Registry could be bad for me?

The main risk for participating in this Registry is that the information you provide could be mistakenly shared or stolen. This is a privacy risk. There are many safeguards in place to prevent this from happening, such as use of an encrypted database (where your information is scrambled), access limited only to the Registry team, and ongoing staff training regarding data privacy and security. There may be other risks we do not know about.

Will being in this Registry help me in any way?

The Registry is not designed to benefit you directly. However, it is possible that it may be helpful to you. For example, you may benefit from being informed about research progress and potential treatment studies that may be helpful to you in the future, or you may benefit from being informed and connected by the network of families and scientists concerned about people with the fragile X premutation. You may experience satisfaction in contributing to the broader mission to improve the lives and find effective treatments for people with the premutation. However, we cannot promise any direct benefits to you or others from your taking part in this Registry.

What happens to the information collected for the Registry?

Efforts will be made to limit use or disclosure of your personal information to people who have a need to review this information. We cannot promise complete confidentiality. Organizations that may inspect and copy your information include the IRB and other University of California representatives responsible for the management or oversight of this Registry.

Can I be removed from the Registry without my OK?

The people in charge of the Registry can remove you from the Registry without your approval. Possible reasons for removal include that you are not 18 years of age or older or that you are not a member of a family affected by fragile X. You will be informed if we find it necessary to remove you from the Registry.

What if I am a resident of the European Economic Area?

This research will collect data about you that can identify you, referred to as Registry Data. European privacy laws require researchers to provide this notice to you when we collect and use Registry Data about people who are located in the European Economic Area (EEA). If you reside in the EEA during your participation in the Registry, your Registry Data will be protected by European privacy laws, in addition to any other laws that might apply. The International FragileX Premutation Registry consent and content, including compliance with GDPR guidelines, has been reviewed by the UC Davis Compliance & Policy Office.

We will obtain and create Registry Data directly from you so we can properly maintain the Registry.

The Registry team will collect and use the following types of Registry Data:

- Contact information (name, home address, email address, phone number, contact information of someone else who knows you well in case that your contact information changes and we cannot reach you)
- Health information (neurological, psychological or reproductive health)
- Genetic data relating to the *FMR1* gene (CGG repeat length, *FMR1* DNA test results)
- Demographic data including race, ethnicity and gender identity (for the purposes indicated above)
- Interest in sharing biological samples in the future, including organ donation after death

We will keep your Registry Data for an undetermined period of time, potentially well beyond 10 years.

The following categories of individuals may receive Registry Data collected or created about you:

- Members of the Registry team so they can properly manage the Registry
- UC Davis staff, such as the Institutional Review Board (IRB), to oversee the Registry to see if it is conducted correctly and to protect your rights

When you enter Registry information about yourself, this Registry Data will transfer to the REDCap database hosted by UC Davis in the United States. The United States does not have the same laws to protect your Registry Data as States in the UK/EU/EEA. However, the research team is committed to protecting the confidentiality of your Registry Data. The registry will undertake appropriate measures to ensure adequate protection of Personal Data, including utilizing appropriate physical, administrative, and technical safeguards to protect Personal Data, as well as executing standard contractual clauses approved by the European Commission or a supervisory authority under GDPR, or obtaining your consent, where appropriate. Additional information about the protections we will use is included above.

If you reside in EEA during your participation in the Study, European privacy laws give you rights relating to your Registry Data, including the right to:

- Request access, correction or deletion of your Registry Data
- Rectify or correct inaccurate or incomplete Registry Data
- Restrict the types of activities the Registry team can do with your Registry Data
- Object to using your Registry Data for specific types of activities
- Request that we move, copy, or transfer your Registry Data to another organization
- Restrict the processing of your Registry Data in certain circumstances
- Object to the processing of Registry Data in certain circumstances
- Request to move your Registry Data in certain circumstances
- Withdraw your consent to use your Registry Data for the purposes outlined in the consent form and in this document. Please understand that you may withdraw your consent to use new Study Data, but Study Data already collected will continue to be used as outlined in the consent document.
- Lodge a complaint with a supervisory authority

The Registry may be obligated to retain your Personal Data as required by U.S. federal or state law
If you wish to exercise your rights, you can contact Dr. David Hessl (916-703-0249; drhessl@ucdavis.edu) or Glenda M. Espinal (916-703-0470; gmespinal@ucdavis.edu) or the UC Privacy Official identified below.

Privacy Officer Contact Information

The Regents of the University of California, on behalf of UC Davis, is responsible for the use of your data for this Registry. The UC Davis Privacy Officer can be contacted at privacy@ucdavis.edu or (530) 752-2407.