

Study Assigned Consent Version #/Date:GW OHR Document Revision Date: 04Jan2019

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Informed Consent for Participation in a Research Study

GW IRB# NCR234775

Title of Research Study: Genome Wide Association Study of Patients with Muscle-Specific

Kinase Myasthenia Gravis

Investigator: Henry Kaminski, MD

Key Information:

You are being asked to take part in a research study because you have muscle specific kinase (MuSK) myasthenia gravis. This page will give you key information to help you decide whether or not you want to participate in this study. More detailed information can be found on the next pages. Ask the research team questions during the consent process, and use the contact information on this form to ask questions later.

What is the purpose, procedures, and duration of this study?

This study is part of the Rare Diseases Clinical Research Network (RDCRN), an initiative of the National Institutes of Health (NIH) to advance medical research on rare diseases. A long-term goal of the network is to improve diagnosis and treatment of rare disease conditions.

The purpose of this study is to understand and identify the variations in genes associated with MuSK myasthenia gravis. We propose to collect saliva samples from 1,000 subjects with MuSK myasthenia and perform a genome wide association study, an approach to find genetic markers associated with a particular disease. This study is done in collaboration with the National Institutes of Health. The expected duration for this study is a one-time submission of saliva sample.

What are the reasons you might choose to volunteer for this study?

There is no direct benefit to you if you agree to provide one-time saliva sample for this research project. Research conducted using your sample will help to better understand causes for MuSK myasthenia and ultimately provide insight for targeted treatment.

What are the reasons you might not choose to volunteer for this study?

There are no physical risks associated with this study. However, there is a potential risk of loss of confidentiality. Research staff will make every effort to keep your information confidential. Information from this research project will be maintained in a secure GW MFA server at the George Washington University under the supervision of Dr. Henry Kaminski. If results of this research study are reported in journals or at scientific meetings, you will not be named or identified.

Do you have to take part in this study?

You do not have to take part in this research. It is your choice whether or not you want to 4775 take part. You can agree to take part and later change your mind. If you choose not to take 8/23/2023

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part or choose to stop taking part at any time, there will be no penalty to you or loss of benefits to which you are otherwise entitled.

Detailed Consent Form:

Why am I being invited to take part in a research study?

We invite you to take part in a research study because you have muscle specific kinase (MuSK) myasthenia gravis.

What should I know about a research study?

- Someone will explain this research study to you. You may ask all the questions you want before you decide whether to participate.
- Participation is voluntary; whether or not you take part is up to you.
- You can agree to take part and later change your mind.
- Your decision not to take part or to stop your participation will not be held against you.
- Your decision will not affect the medical care you receive from GW. If you decide not to take part, you can still receive medical care from GW.
- You may take this document home to read or to discuss with your family members or doctor before deciding to take part in this research study.

Why is this research being done?

This first ever study aims to collect saliva samples for DNA analysis from 1000 patients with muscle specific antibody positive myasthenia gravis. These DNA samples are then used in development of a genome-wide association study (GWAS).

Genome-wide association studies (GWAS) would highly likely allow us to identify genes associated with a MUSK myasthenia. GWAS has been used in other forms of MG to understand the disease better, but never in MUSK MG. Knowing genes putting patients at risk will tell us more about how the disease may start and then potentially better ways to identify people at risk and treat the disease.

How long will I be in the study?

The expected duration is to provide a one-time saliva sample.

How many people will take part in this research study?

We expect about 1000 people will take part in the entire study.

What happens if I agree to be in this research?

If you agree to be in this research, you will need to contact the study team to learn more about the study. You will undergo informed consent process to sign consent form provided with confirmation of your MuSK myasthenia gravis diagnosis. You will then provide saliva sample in person or through mail to be returned back to George Washington University.

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Saliva Collection Procedure:

- **Step 1:** Remove the collection funnel and tube from the pack. Next, twist to close the collection funnel on to the tube gently.
- Step 2: Spit saliva into funnel and repeat until saliva liquid (not foam) reaches fill line.
- **Step 3:** Untwist the collection funnel and replace the tube cap tightly. Discard the funnel.
- **Step 4:** Shake the tightly closed tube a few times to mix the saliva with the solution.

<u>Note:</u> Saliva collection may seem simple, but does take time and effort to fill the small container to the fill line. The liquid part of the saliva needs to be at the fill line and bubbles do not count. This process often takes several minutes to produce enough saliva and people with a dry mouth may take longer.

What other choices do I have besides taking part in the research?

Instead of being in this research study, your choices may include participating in other research studies available to you and/or continuing your standard of care to which you would otherwise be entitled.

What happens if I agree to be in research, but later change my mind?

You may refuse to participate or you may discontinue your participation at any time without penalty or loss of benefits to which you would otherwise be entitled.

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

The risks and discomforts associated with participation in this study are not greater than those ordinarily encountered in daily life or during the performance or routine physical or psychological examinations or tests.

What happens to my information collected for the research?

Limited demographic data (name, DOB, sex at birth, race, ethnicity) and clinical data (medical history and family history), will be collected by the George Washington University research team under supervision of Henry Kaminski, MD. This limited data will be stored in a primary research database at the RDCRN Data Management and Coordinating Center (DMCC) at the Cincinnati Children's Hospital designated by the National Institutes of Health. You will be assigned a subject identifier as part of the study and a code number called a Global Unique Identifier (GUID) using an NIH GUID system. The GUID is a unique code made up of letters and numbers that allows researchers to share data from other studies in which you have participated without letting others know who you are. A GUID does not contain direct identifiers, and you cannot be identified using only the GUID. To generate the GUID, we will ask you for your full date of birth (day, month, year), first name at birth, last name at birth, middle name at birth (if applicable), city/municipality of birth, country of birth.

We would like to make your data, without direct personal identifiers, available for other research studies that may be done in the future. The deidentified data/samples collected from this study will be shared and stored indefinitely at the NIH lab of Dr Traynor. Any personal 108/23/2023

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identifiable information will not appear in the federal data repository or this study clinical research database with exception of e-consent option maintained by the RDCRN DMCC which includes subject's name and contact information. This information will be stored to document electronic consenting process and to contact study team if you have any questions. A code link with your name and other identifying information will be kept in a secure, password protected file under GW MFA servers maintained by GW research team under supervision of Henry Kaminski, MD.

Our goal is to make more research possible to learn about health and disease. The NIH and the data management center uses several layers of protection for the clinical data stored there. It meets all of the local and federal security requirements for research datacenters. Researchers who want access to your data will have to tell the NIH, through a data access request and application process, about the research they want to do. They will have to do ethics training and have IRB approval to do the research. They will have to sign a legal agreement stating they will not try to find out who you are.

To the extent allowed by law, we limit your personal information to people who have to review it. We cannot promise complete secrecy. The IRB and other representatives of this organization may inspect and copy your information. Others include the National Institutes of Health whom we are collaborating with in this research project.

To help us protect your privacy, we have obtained a Certificate of Confidentiality from the National Institutes of Health. The researchers can use this Certificate to legally refuse to disclose information that may identify you in any federal, state, or local civil, criminal, administrative, legislative, or other proceedings, for example, if there is a court subpoena. The researchers will use the Certificate to resist any demands for information that would identify you. The Certificate cannot be used to resist a demand for information from personnel of the United States Government that is used for auditing or evaluation of Federally funded projects or for information that must be disclosed in order to meet the requirements of the federal Food and Drug Administration (FDA). You should understand that a Certificate of Confidentiality does not prevent you or a member of your family from voluntarily releasing information about yourself or your involvement in this research. If an insurer, medical care provider, or other person obtains your written consent to receive research information, then the researchers will not use the Certificate to withhold that information. The Certificate of Confidentiality will not be used to prevent disclosure to state or local authorities for reasons such as child abuse and neglect, or harm to self or others.

Electronic Consent (eConsent) option

If you choose to use the electronic consent option instead of paper option, you will be directed to a website and database administered by the Data Management and Coordinating Center (DMCC) at the Cincinnati Children's Hospital. You will be asked to enter your name and contact information into the electronic website. This information will be stored to document the electronic consenting process and to contact you if you indicate you have any questions. All of the study information will be stored and maintained securely by the Data Management and Coordinating Center (DMCC) at the Cincinnati Children's Hospital and vendors they use for secure storage. Linkages with other data sources will be performed

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without revealing your identity to authorized researchers. We will not give out your name or any other information that could directly identify you to other researchers.

Sample for Genetic Testing

Dr. Traynor at the National Institute of Aging at the NIH will perform genetic analysis or genetic testing on your sample. Genetic research is a research that studies genes, including gene characteristics and gene versions that are transmitted by parents to children. Genetic research may include looking at information, such as personal appearance and biochemistry, gene sequences, genetic landmarks, individual and family medical histories, reactions to medications and responses to treatment. Genetic research raises certain questions about informing you of any results. Possible risks of knowing results include: anxiety; other psychological distress; and the possibility of insurance and job discrimination. A possible risk of not knowing includes being unaware of the need for treatment. These risks can change depending on the results of the research and whether there is a treatment or cure for a particular disease.

Sometimes patients have been required to furnish information from genetic testing for health insurance, life insurance, and/or a job. A Federal law, the Genetic Information Nondiscrimination Act of 2008 (GINA), generally makes it illegal for health insurance companies, group health plans, and employers with 15 or more employees to discriminate against you based on your genetic information.

Furthermore, Investigators in this study may try to re-contact you in the future. If you are re-contacted and want to know what the investigators have learned about your samples, you should understand the following:

- The information may be too limited to give you particular details or consequences;
- You may be determined to carry a gene for a particular disease that can be treated;
- You may be determined to carry a gene for a particular disease for which there is no current treatment;
- You carry a gene for a disease and might consider informing relatives that they, too, might carry the gene.

*May we co	ntact you a	about future studies	that may be of i	nterest to you?
Yes _	No			

How will my privacy and health information be protected?

The Health Insurance Portability and Accountability Act (HIPAA) requires that researchers and health care providers protect the privacy of information that identifies you and relates to your past, present and future physical and mental health or conditions, or the provision of health care. If you agree to participate in this research, protected health information will be used and shared with others for purposes of the study.

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Below is more detailed information about how your health information will be shared and protected. By signing this form, you are allowing the people and groups that are listed in the next paragraphs to use your health information for this research study. Your information will only be used or shared as explained in this authorization form.

Protected health information that may be used and released (disclosed) in this study includes information such as:

- This consent form
- Demographic information (like your name, date of birth, etc.)
- Information about your medical history from your medical records and your doctor's office
- Laboratory results obtained on specimens collected from you (your blood sample);
- Interviews with you conducted by members of the Research Team
- Other data created or collected during this study

Only members of the GW research team may obtain your individual protected health information from hospitals, clinics, health care providers, and health plans that provide health care to you as part of the eligibility and recruitment process performed at GW. GW research team will recruit and assign your saliva sample with a study designated identification number. Your sample will be stored at the MFA neurology clinic and Ross Hall at GW School of Medicine and Health Sciences until shipment under supervision of principal investigator, Henry Kaminski, MD. Only your de-identified data and saliva sample, without any information that identifies you will be shipped to Bryan Traynor, MD laboratory of Neurogenetics at the NIH for processing.

By signing this form, you allow the use, sharing, copying, and release of your protected health information in connection with this study by:

- The members of the GW research team
- Other healthcare providers such as labs which are part of the study;
- Institutional officials who are responsible for compliance;

If you decide to take part in this study, your consent for this study will not expire unless you cancel (revoke) it. The information collected during your participation will be kept indefinitely. You can always cancel this Authorization by writing to the study doctor. If you cancel your Authorization, you will also be removed from the study. However, standard medical care and any other benefits to which you or the person you are caring for are otherwise entitled will not be affected. Canceling your Authorization only affects the uses and sharing of information after the study doctor gets your written request. Information gathered before then may need to be used and given to others. Once your health information has been disclosed to others outside of the medical practice, the information may no longer be covered by the federal regulation that protects privacy of health information. You can also refuse to sign this consent/Authorization and not be part of the study. You can also tell us you want to leave the study at any time without canceling the Authorization.



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By signing this consent form, you give us the permission to use and/or share your health information as stated above.

Finally, you should understand that the study doctor is not prevented from taking steps, including reporting to authorities, to prevent serious harm to yourself or others.

Are there any costs for participating in this research?

There are no costs for participating in this research study.

Will I be paid for my participation in this research?

If you agree to take part in this research study, you will be paid \$20 for your time and effort. You will be paid in the form gift card of your choice (VISA gift card, or Amazon e-gift card). Please note if you choose physical card, payment will be processed through GW's forte system, the university's preferred payment option for study participants. Your consent to use this system will need to be obtained in separate consent form.

What else do I need to know?

A federal law, called the Genetic Information Nondiscrimination Act (GINA), generally makes it illegal for health insurance companies, group health plans, and most employers to discriminate against you based on your genetic information. This law generally offers the following protections:

- Health insurance companies and employer-based group health plans may not request your genetic information that we get from this research.
- Health insurance companies and employer-based group health plans may not use your genetic information when making decisions regarding your eligibility or premiums.
- Employers with 15 or more employees may not use your genetic information that we get from this research when making a decision to hire, promote, or fire you or when setting the terms of your employment.
- All health insurance companies and group health plans must follow this law. All employers with 15 or more employees must follow this law as of November 21, 2009. The protections offered by GINA apply regardless of when the research that obtained the genetic information was conducted, even if prior to the effective date.

Be aware that this law does not protect you against discrimination on the basis of your genetic information by companies that sell life insurance, disability insurance, or long-term care insurance.

If you have any questions, concerns or complaints about the study contact your study team, listed below:

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	Study Doctor	Study Coordinator
Name:	Henry Kaminski, MD	Helen Girma
Address:	2150 Pennsylvania Ave NW 7 th Floor Washington DC 20037	2150 Pennsylvania Ave NW 7 th Floor Washington DC 20037
Telephone number:	202-741-2710	202-677-6205
Email address:	hkaminski@mfa.gwu.edu	hgirma@mfa.gwu.edu

If you have any questions, concerns or complaints about your rights as a research participant and the research, The Office of Human Research of George Washington University, at telephone number (202) 994-2715, can provide further information.

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Signature Block for Adult

By signing below, you agree that the above information has been explained to you and you have had the opportunity to ask questions. You understand that you may ask questions about any aspect of this research during the course of the study and in the future. Your signature documents your permission to take part in this research. Your signature documents your permission to take part in this research.

Printed name of subject	
Signature of subject	————Date
Signature of person obtaining consent	 Date