The University of Texas Southwestern Medical Center
Parkland Health & Hospital System
Children's Medical Center
Texas Scottish Rite Hospital for Children

CONSENT TO PARTICIPATE IN RESEARCH

Title of Research:	Immunologic and genetic profiles in subsets of morphea patients.
Funding Agency/Sponsor:	UT Southwestern Medical Center – Department of Dermatology
Study Doctors:	Heidi Jacobe, M.D.
Research Personnel:	Andrew Kim

You may call these study doctors or research personnel during regular office hours at 214-645-8971, at other times, you may call them at 214-588-0192.

Note: If you are a parent or guardian of a participant younger than 18 years of age and have been asked to read and sign this form, the "you" in this document refers to the participant.

Instructions:
Please read this consent form carefully and take your time making a decision about whether to participate. As the researchers discuss this consent form with you, please ask him/her to explain any words or information that you do not clearly understand. The purpose of the study, risks, inconveniences, discomforts, and other important information about the study are listed below. If you decide to participate, you will be given a copy of this form to keep.

What is DNA?
DNA means deoxyribonucleic acid. DNA is the substance in our cells which contains information we inherited from our parents and other family members. Your DNA contains "genes" which predict things like physical characteristics (eye color, hair color, height, etc.) and may also be a factor in whether you develop or are at risk of developing certain illnesses or disorders.

What is genetic testing?
Genetic tests look for naturally occurring differences in a person's genes, or the effects of specific genes. These differences could indicate an increased chance of getting a

Study ID: STU 112010-028 Date Approved: 6/25/2012 Expiration Date: 1/31/2013

disease or condition. Genetic testing includes gene tests (DNA testing) and sometimes biochemical tests (protein testing) if it relates to a specific gene.

In gene tests, DNA in cells taken from a person's blood, body fluids or tissues is examined for differences. The differences can be relatively large - a piece of a chromosome, or even an entire chromosome, missing or added. Sometimes the change is very small - as little as one extra, missing or altered chemical within the DNA strand. Genes can be amplified (too many copies), over-expressed (too active), inactivated, or lost altogether. Sometimes pieces of chromosomes become switched, turned over or discovered in an incorrect location.

Why is this study being done?
This study is being done to investigate markers associated with morphea. We can find some of these markers in your blood (cell of the immune system and products made from these cells) and in the skin of your affected morphea areas. The purpose of this research is also to see how morphea changes over time.

Why am I being asked to take part in this research study?
You are being asked to take part in this study because you have morphea.

How many people will take part in this study?
About 370 people will take part in this study at UT Southwestern, Children's Medical Center, Parkland Health & Hospital System, and Texas Scottish Rite Hospital for Children.

What is involved in the study?
If you agree to be in this study, you will be asked to sign this consent form and will have the following test and procedures.

Screening: The study doctor will ask you questions about your health, the health of your close family members, medications you take for any health problems, and any surgical procedures you have had. You will complete a questionnaire on how your skin condition affects your quality of life.

The study doctor and her staff will evaluate your diagnosis of morphea and confirm that this is the correct diagnosis.

You will have the following evaluations:
Photographs of your morphea, ultrasound (non-invasive imaging of the thickness of the skin) of the morphea, two 6-mm (about ½ the size of a pencil eraser) punch biopsies (skin samples) of the skin from the morphea plaque and the other from site-matched unaffected skin area (biopsies obtained for adult subjects only), 30 mL (2-3 tablespoons) of blood drawn from a vein in the hand or arm, These procedures may be done even if you do not participate in this research.

You will have the blood sample analyzed for DNA, naturally occuring compounds that affect the function of your immune system, in addition to routine tests a doctor may order for you. The skin biopsies (collected on adult subjects only) will be sent for examination under the microscope as well as for culture of cells and products abnormally expressed in morphea These procedures are being done more often because you are in this research.

Evaluations during the research: You will have one main visit where this catalogue of morphea characteristics take place. After this time we will invite you to return five more times on a yearly basis to evaluate any changes your medical history, changes in the morphea, photographs, as well as redrawing the blood to retest for immune and inflammatory markers. If the morphea is noted to have progressed or a new type is seen, the investigator will perform additional biopsies (on adult subjects only) of the new site and unaffected skin.

	STUDY VISITS						
Procedures	**Screening**	**Year 0 – 1st visit**	**Year 1 – 2nd visit**	**Year 2 – 3rd visit**	**Year 3 – 4th visit**	**Year 4 – 5th visit**	**Year 5 – 6th visit**
Chart review	X	X					
Phone interview	X	X*	X*	X*	X*	X*	X*
Medical History	X	X	X	X	X	X	X
Informed Consent		X					
Demographics	X	X					
Inclusion / Exclusion	X						
6 -mm punch biopsies (affected and unaffected sites)		X ->					
Fibroblast culture		X ->					
Gene expression microarray analysis		X ->					
DNA analysis		X ->					
Laboratory Tests (Basic blood tests, immune, and inflammatory markers)		X	X	X	X	X	X
Assessment of morphea changes			X	X	X	X	X

Study ID: STU 112010-028 Date Approved: 6/25/2012 Expiration Date: 1/31/2013

Dermatology Quality-of-life Questionnaire		X	X	X	X	X	X
Photographs		X	X	X	X	X	X
15 mHz-ultrasound		X	X	X	X	X	X
Modified-Rodnan-skin-score		X	X	X	X	X	X
Assessment of treatments (if any)	X	X	X	X	X	X	X

X* Phone interviews may be completed in lieu of complete exam in the research center if the patient has moved out of the area.
X -> These tests may be repeated in follow-up visits if the morphea is noted to have progressed or a new type of morphea lesion is present that was not present in a prior visit.

The visits for the study will last approximately one hour.

We plan to follow up with you for five years after you enroll in the study, on a yearly basis. Additional follow-ups may be necessary to answer this question in the future.

- **Questions:** Heidi Jacobe, MD will ask you questions about your medical history, family history, and previous treatments used for morphea.
- **Samples of Blood:** Up to 3 tablespoons of blood will be drawn from a vein in your arm with a small sterile needle. This is the standard method used to obtain blood for routine hospital tests. We may ask for a second blood sample if the research laboratory cannot process the first sample.

  You may have the option of off-site blood draws if: 1) you are already scheduled with a phlebotomist and prefer to have blood drawn at that time, 2) we are unable to draw your blood sample or 3) if we encounter difficulty while performing your blood draw (particularly, for pediatric patients). In cases such as these, you will be provided with an instruction sheet on how to appropriately collect off-site blood collections.

- **Skin Tissue Biopsy:** We would like to obtain a small piece of skin (less than 1/8") to be used for DNA analysis, culture of skin cells, microscopic study of the skin, or other laboratory tests. The skin will be removed using a local anesthetic (numbing medication) and a special instrument called a "punch". This procedure will be done on adult subjects only.
- **Medical Record:** You are also being asked for permission to obtain from your medical records information about your history and treatment that will make your tissue samples even more useful to the research community.

How will my samples be identified?
To protect your information, personally identifiable information will be kept in a secure facility with limited access and password protection. The computer maintained by UT Southwestern is protected by a firewall which prevents unauthorized access to the information. Any results collected will not be released in a personally identifiable manner, and thus no information will be given to your insurance provider, employer, family, etc. without your permission.

Your sample will be marked with a coded identifier and will not be personally identifiable. Neither your name nor any identifying information will be given to the researchers who receive your samples.

How long can I expect to be in this study?
In many genetic studies, testing of the DNA may go on for very long periods of time. This is true because we are continually finding new genes that may be involved in morphea. Therefore, while your direct participation in this study will be over once you have completed the procedures/visits described above; the DNA isolated from your blood/tissue sample may continue to be studied for many years.

Can I stop taking part in this research study?
Yes. If you decide to participate and later change your mind, you are free to stop taking part in the research study at any time. You may ask Heidi Jacobe, MD to destroy any record of your participation in this research and to destroy any sample with your name on it. You will not be asked for further information or samples. Your identity will be removed from all research records. However, the resulting data from the research will not be discarded. De-identified copies of DNA and/or growing cells made from your samples will not be destroyed.

Samples sent to other scientists cannot be identified and destroyed because your name was removed before the samples were shipped to other medical centers.

What will happen to the samples collected for this research? Heidi Jacobe, MD will compare information about the health of participants with the results of research tests using their DNA.

Your blood/tissue sample will be used to isolate DNA for genetic analysis. Part of your blood/tissue sample will also be used to grow a long term cell line. This immortalized cell line, called a lymphoblastoid cell line (or fibroblast cell line) will be stored in a Cell Bank and will be available for research, both now and in the future. This also allows us to perform many tests without having to ask you for additional blood/tissue samples.

How is DNA obtained? Cells from blood or other body materials are processed in a laboratory that has special equipment that can extract DNA and identify genes.

How long will my samples be kept? Heidi Jacobe, MD will keep your sample in a research laboratory at this medical center until it is all gone, becomes unusable or until she decides to discard the sample.

If your sample remains stored beyond your lifetime, your sample will be used as described in this document.

May other researchers use my sample? When you provide a sample for purposes of this study your sample becomes the property of The University of Texas Southwestern Medical Center and may be used for future studies or provided to other investigators at other medical research facilities without any identifiers.

Who decides which research scientists may receive samples of my DNA?
Heidi Jacobe, MD will decide which researchers at this medical center and at other medical centers may receive samples of your DNA. Your samples may be used in other research only if the other research has been reviewed and approved by an Institutional Review Board (IRB).

Could my sample be used for other purposes? No. Your samples or your DNA will only be used for research.

Research tests using your sample may possibly result in inventions or procedures that have commercial value and are eligible for protection by a patent.

Compensation for any future commercial developments is not available from the University of Texas Southwestern Medical Center at Dallas, its researchers or other facilities or researchers whose research may benefit from the use of your sample.

By agreeing to the use of your sample in research, you are giving your sample without expectation of acknowledgment, compensation, interest in any commercial value or patent, or interest of any other type. However, you retain your legal rights during your participation in this research.

Will the results of research tests be reported to me? No. Heidi Jacobe, MD will use samples of your DNA only for research. The samples will not be used to plan your health care.

What are the risks of the study?
Questions
We will ask you questions about your health. However, you can skip any question that makes your uncomfortable.

Risks of Blood Drawing
Risks associated with drawing blood from your arm include minimal discomfort and/or bruising. Infection, excess bleeding, clotting, and/or fainting are also possible, although unlikely. If you have unusual symptoms, pain, or any other problems while you are in

the study, you should report them to the researcher staff right away. Telephone numbers where they can be reached are listed on the first page of this consent form.

You will have up to 3 tablespoons of blood collected once a year for 5 years because you are in this research study.

Biopsy Samples
The most common side effects associated with biopsies of the skin are pain at the site, bleeding, bruising at the site, scarring at the site and infection at the site. The side effects associated with local anesthetic include allergic reactions to the anesthetic which can include redness and swelling at the injection site and in severe cases can cause breathing difficulty. It is possible that the anesthetic may not numb the area entirely or the area may remain numb for a prolonged period of time.

Stress
You could experience stress from participating in this kind of research. Knowing that researchers have personal information about you may trouble you.

Personal, sensitive information
If you are not the parent of a child in your family, or if you are the parent of a child in another family, that information could be learned from DNA tests. This kind of information will **not** be reported to you or other family members.

Unforeseen Risks and New Information
There may possibly be risks to your participation in this research which Heidi Jacobe, MD does not know about now. You will be told if any new information becomes available during the study that could cause you to change your mind about continuing to participate or that is important to your health or safety

Loss of Confidentiality
Any time information is collected; there is a potential risk of loss of confidentiality. Every effort will be made to keep your information confidential; however, this cannot be guaranteed. For more information, please see the section called "Will my information be kept confidential?"

What are the possible benefits of this study?
If you agree to take part in this study, there is usually no direct benefit to you.

We hope the information learned from this study will benefit others with morphea in the future. Information gained from this research could lead to better care/treatment.

What other options do I have?
You may choose to not participate in this study. If you decide not to take part in this research study, it will have no effect on your medical care.

Will I be paid if I take part in this research study?
No. You will not be paid to take part in this research study. There are no funds available to pay for parking expenses, transportation to and from the research center, lost time away from work and other activities, lost wages, or child care expenses

Will my insurance provider or I be charged for the costs of any part of this research study?
No. Neither you, nor your insurance provider, will be charged for anything done only for this research study (i.e., the Screening Procedures, Experimental Procedures, or Monitoring/Follow-up Procedures described above).

However, the expenses for routine health check-ups or standard medical care for your any medical problem (care you would have received whether or not you were in this study) is your responsibility (or the responsibility of your insurance provider or governmental program). You will be charged, in the standard manner, for any procedures performed for your standard medical care.

What will happen if I am harmed as a result of taking part in this study?
It is important that you report any suspected study-related illness or injury to the research team listed at the top of this form immediately.

Compensation for an injury resulting from your participation in this research is not available from the University of Texas Southwestern Medical Center at Dallas, Children's Medical Center, Parkland Health & Hospital System, and/or Texas Scottish Rite Hospital for Children].

You retain your legal rights during your participation in this research

Information about you that is collected for this research study will remain confidential unless you give your permission to share it with others, or as described below. You should know that certain organizations that may look at and/or copy your medical records for research, quality assurance, and data analysis include:

- UT Southwestern Medical Center – Department of Dermatology
- Representatives of government agencies, like the U.S. Food and Drug Administration (FDA), involved in keeping research safe for people; and
- The UT Southwestern Institutional Review Board.

In addition to this consent form, you will be asked to sign an "Authorization for Use and Disclosure of Protected Health Information." This authorization will give more details about how your information will be used for this research study, and who may see and/or get copies of your information.

To help us further protect the information the investigators will obtain a Certificate of Confidentiality from the U.S. Department of Health and Human Services (DHHS). This

Certificate adds special protections for research information that identifies you and will help researchers protect your privacy. This Certificate does not mean the government approves or disapproves of our project.

With this Certificate of Confidentiality, the researchers cannot be forced to disclose information that may identify you in any judicial, administrative, legislative, or other proceeding, whether at the federal, state, or local level. There are situations, however, that legally require disclosure, such as:

- to DHHS for audit or program evaluation purposes;
- information regarding test results for certain communicable diseases to the Texas Department of State Health Services, including, but not limited to HIV, Hepatitis, Anthrax, and Smallpox;
- if you pose imminent physical harm to yourself or others;
- if you pose immediate mental or emotional injury to yourself;
- if the researchers learn that a child has been, or may be, abused or neglected; or
- if the researchers learn that an elderly or disabled person has been, or is being, abused, neglected or exploited.

The researchers will not, in any case, disclose information about you or your participation in this study unless it is included in the Authorization for Use and Disclosure of Protected Health Information for Research Purposes or it is required by law (as mentioned above).

The Certificate of Confidentiality does not prevent you or a member of your family from voluntarily releasing information about your involvement in this research study. In addition, the researchers may not use the Certificate to withhold information about your participation in this research study if you have provided written consent to anyone allowing the researchers to release such information (including your employer or an insurance company). This means that you or your family must also actively protect your privacy.

A Certificate of Confidentiality does not represent an endorsement of this research project by the Department of Health & Human Services or any other Federal government agency.

Whom do I call if I have questions or problems?

For questions about the study, contact Heidi Jacobe, MD at 214-645-8971 during regular business hours and at 214-645-2400 after hours and on weekends and holidays.

For questions about your rights as a research participant, contact the UT Southwestern Institutional Review Board (IRB) Office at 214-648-3060.

Will I be contacted in the future?

You have the option to elect to be contacted in the future in order to obtain follow-up information or to ask you to take part in more research. (A "no" answer will not disqualify you from this research.)

Yes _____initials No _____initials

If you elect "yes", please keep in touch with Heidi Jacobe, MD and maintain a current address and telephone number on file. Please notify Heidi Jacobe, MD if your legal name changes.

It is your responsibility to inform a child that samples of his or her DNA may be kept in a research laboratory at this medical center or possibly other medical centers. The child will not be asked to sign another consent form when he/she reaches age 18.

SIGNATURES:

YOU WILL HAVE A COPY OF THIS CONSENT FORM TO KEEP.

Your signature below certifies the following:

You have read (or been read) the information provided above.
- You have received answers to all of your questions and have been told who to call if you have any more questions.
- You have freely decided to participate in this research.
- You understand that you are not giving up any of your legal rights.

SAMPLE FORM

Participant's Name (printed)

Sf\M('t;6 Bi-M _____

Participant's Signature Date

_____

Legally authorized representative's Name (printed)

_____ _____

Legally authorized representative's Signature Date

_____

Name of person obtaining consent (printed)

Signature of person obtaining consent

Date

ASSENT OF A MINOR:

I have discussed this research study with my parent or legal guardian and the researchers, and I agree to participate.

Signature of participant (age 10 through 17)

Date