THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT HOUSTON
INFORMED CONSENT FOR TAKING PART IN RESEARCH
"Hepatocellular Carcinoma and Advanced Liver Fibrosis in Hispanics in South Texas"

HSC-SPH-15-0167

INVITATION TO TAKE PART

You are invited to take part in the family cohort of the research study called, "Hepatocellular Carcinoma and Advanced Liver Fibrosis in South Texas" conducted by Susan P. Fisher-Hoch of the University of Texas Health Science Center at Houston (UTHealth). Your decision to take part is strictly 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 being a part of the research project will not change the services that are otherwise available to you. You may refuse to answer any questions on any forms if you wish, and this will not affect your opportunity to take part in the studies of your blood or physical condition. You can ask questions at any time of the individuals who are interviewing you. 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-SPH-15-0167.

Purpose of the Study:
The purpose of this research study is to determine the risk factors for liver fibrosis ("liver disease") and hepatocellular carcinoma ("liver cancer"). You do not have to have liver disease or liver cancer in order to participate. The research team is working on ways to diagnose fibrosis and cancer earlier. The research team will also use ultrasonography and imaging to help determine the evidence of the causes and progress of diseases of the heart, circulatory system, kidney, and liver in Mexican American adults living in South Texas. Ultrasonography is a technique that uses sound waves to produce images. Additionally, the research will examine the genes in liver cells or blood cells to understand how genes contribute to liver disease and liver cancer. You are being asked to take part in this study because you have had your liver biopsied, you have been diagnosed with liver disease or liver cancer, or because someone in your family has been diagnosed with liver disease or liver cancer.

This study is taking place at the UTH School of Public Health Clinical Research Unit in Brownsville, Doctor's Hospital at Renaissance, and the University of Arizona College of Medicine Phoenix. A total of 1080 people will participate. The study will be paid for by The UT Health Science Center at Houston.

Procedure:
If you agree to be in this study, you will be asked to have a medical examination at the Hispanic Health Research Center, Clinical Research Unit of UTHealth School of Public Health in-Brownsville at 800 West Jefferson Street, Edelstein Professional Building Suite 230, Brownsville, TX 78520.

An appointment will be made for this examination at a time that is convenient for you. The examination will take about 2 ½ to 3 hours. In addition, ultrasound examinations will take about 1½ hours. You cannot eat or drink anything, except water, 10 hours before the examination. On the day of your examination, your blood pressure, weight, height, waist and hip circumference, and body fat will be measured. A test of your heart (electrocardiogram) will be performed. You will also be asked questions about your health, physical activity, nutrition, mental health, depression and anxiety.

A sample of blood (about 3 tablespoons or 42.5 mL) will be taken from a vein in your arm to test your blood sugar, cholesterol, triglycerides, complete blood count (CBC, which provides information about the kinds of blood cells and their numbers in your body), and related factors.

The white blood cells from your blood samples will be isolated and preserved since they are present in everyone's blood and contain the genetic code called DNA. They also contain RNA. DNA and RNA codes help explain why we look different, these differences can also help explain why some people develop certain diseases and others do not; and why some people react better to certain drugs than other people. This study will use the DNA and RNA to find genes that cause liver disease and liver cancer, its complications and related diseases like heart disease and obesity. If at any time you wish your stored DNA to be destroyed, you may request this and we will make every effort to make sure this is done promptly.

We are also asking that you give us a urine sample. Your sample will be used for tests related to your health. If you agree, our research staff gives you instructions on how to collect the urine sample and a cup to do so.

COLLECTION AND STORAGE OF SPECIMENS

The purpose of this study is to understand factors related to liver disease and liver cancer.

Please answer (circle) Yes or No for each statement below:

YES NO I agree to allow my samples to be tested for factors related to liver disease and liver cancer for this study.

YES NO I agree to allow my samples to be stored for up to 5 years after the study ends at the research laboratory at the UTHealth , School of Public Health in Brownsville for future use studying factors related to liver disease and liver cancer. Afterwards, my samples will be destroyed.

YES NO I agree to allow my samples collected for this study to be stored for any future studies done by the Principal Investigator.

YES NO I agree that anonymous information about my samples collected for this study may be made available to qualified researchers outside of this study for future studies related to liver disease and liver cancer.

YES NO I agree that anonymous information about my samples collected for this study may be made available to qualified researchers outside of this study for any future studies.

YES NO I wish to be contacted if there is any development of clinically relevant information.

YES NO I agree for the results from my specimen testing to be released as directed in the PHI section below.

If you agreed to allow your samples collected for this study, your blood samples will remain in the study for 5 years after the study ends.

After your blood is obtained, a trained staff member will measure your weight, height, waist and hip circumference. To measure your weight you will be asked to take off your shoes and step onto a scale. Your height will be also measured with your shoes off while you stand straight.

You will have your waist measured with a non stretching measuring tape placed around the navel part of your body. Your blood pressure will be measured 3 times after you have rested for a few minutes. You will be asked not to speak during the time that we are measuring your blood pressure. A blood pressure cuff will be wrapped around your arm and inflated to take these measurements. Next we will measure the activity of your heart using a machine called an electrocardiogram. You will have to lay down and have 10 patches placed on your chest, on your hands and feet to measure your heart activity. We will also measure your body fat. You will have to lay down and rest for 5 minutes, and have 4 patches placed on your hand and foot, so you will need to remove your socks.

We will then ask you a series of questions to learn what foods you eat; your physical activity; the condition of your heart; other medical history information; questions about depression and anxiety, the condition of your health and the names, ages, and health of your parents. We will also ask questions about your children, siblings, and grandparents.

In some instances your close relatives (children, grandchildren, parents, or siblings) may be contacted to take part in the study at a later date. You may have the opportunity to come in for repeat testing.

After your visit, you will be contacted every 6 months by phone to update contact information. In addition, you will be asked to complete a follow-up visit after 2 years that will include the same tests that you complete today.

After your appointment, we will request your complete medical records from your doctors. If you have had a liver biopsy or liver surgery, we will also ask for a portion of the remaining liver tissue sample in order to do more tests. After testing, the tissue will be sent to storage with your doctor. This will not require any action on your part, and will not interfere with your medical care.

Ultrasonography is not invasive and is generally not painful. The appointment will be made for these exams at a time that is convenient for you. You cannot eat or drink anything, except water, for at least 6 hours before the liver, elastography & brachial artery exams. An ultrasound of your neck, an echocardiogram, and a measure of segmental vascular pressure will be performed. If the previous blood results are over 3 months old, you will also be asked for a small sample of blood (about two teaspoons or 10 ml) taken from a vein to test your blood sugar, comprehensive metabolic panel and related factors.

The **echocardiogram** is a safe and painless procedure. You can take regular medication and fasting is not required. Wear a two piece outfit for the test. You may be asked to remove clothing and jewelry from the waist up. You will be given a short hospital gown. You will be asked to lay down on your left side with your left arm above your head during the exam. Small electrodes will be placed on your chest to monitor your heartbeat. A transducer, an instrument used to take the images (also known as a probe), coated with gel will be moved over your chest.

For the **carotid ultrasound**, for which you are not required to be fasting, you will be asked to lie down and have three adhesive patches attached to your chest. These adhesive patches will be used to obtain an electrocardiogram tracing to measure your heart rate throughout the test. You will be asked to turn your head halfway to the left. Gel will be applied to the right part of the neck and the ultrasound probe will be moved around until the required images are obtained. This will then be repeated on the left side of the neck. The ultrasound images will be used to measure the thickness of the arteries on the right and left sides of the neck that supply blood to the brain and to the face.

The **brachial ultrasound** is to measure the flexibility of the artery in the right upper arm. For this ultrasound you need to be fasting; no vitamins and no smoke will be allowed before the scan. Gel will be applied to the right upper arm. The brachial artery is a large artery that is in your upper arm. After blood pressure has been determined in the left arm, another narrow sleeve will be placed on the lower right arm. The ultrasound probe, a flat sensor, will be moved to various positions on the upper arm until the desired images are obtained. Ultrasound images will continue to be taken while the sleeve is inflated for 5 minutes and after the sleeve is deflated. You are going to be asked not to move your hand or fingers during those 5 minutes. Blood pressure will also be taken after the ultrasound test. Because this ultrasound test is for research purposes only, the results of the test will not be given to you or to your doctor unless the tests uncover a medical problem.

The **liver ultrasound** and **elastography** are not invasive tests and do not cause discomfort. You need to be fasting for at least 6 hours prior to the exam to maximize the distention of the organ and to increase the quality of the image or to prevent the liver reflection. Also, it is recommended to not smoke before the ultrasound. The smoke increases the air in the superior intestinal tract and also can reduce the quality of the image. You will be asked to lie down facing up with your right arm above head and the right leg stretched, and then you will asked to change position and lay down on the side. Gel will be applied in the right side of your abdomen. The elastography will provide additional images to measure fatty changes in the liver, known as steatosis.

For the **segmental pressure vascular testing** fasting is not required. Wear shorts for the test. You will be asked to lie down facing up. Blood pressure cuffs will be placed on both arms and both legs, ankle, below the knee, above the knee, thigh, and feet as well as on big toes. The blood pressure cuffs will be connected to the Doppler one at a time. Blood pressure readings will be taken from both arms. Then, readings will be taken for the right foot and leg. Once the right side is complete, the process will be repeated on the left side.

The Doppler is an instrument that emits sounds waves into the body. The resulting waves produce an image that will be printed and interpreted. The images of these studies will be sent, without any identifying information, to a reading center in Houston, where specialists will interpret them.

You will be asked to answer questions for the segmental pressure vascular testing. These questions ask about whether you are having difficulty walking. We would like to know how much difficulty you have walking. We will also ask about the condition and care of your feet. This will take approximately 15 minutes to complete.

For the **DXA** exam you will be asked questions about bone fractures and risk factors. Body composition (percentage of fat, bone, water, and muscle) will be measured and calculated by Dual Energy X-ray absorptiometry (DXA). You will be asked to wear a gown and to remove all metal objects (glasses, jewelry, cell phones). You will be asked to lie still on a table where your entire body will be scanned. Study personnel will position you in order to obtain the best images. We will take x-rays of your hip, lower back (lumbar), complete spine while on your right side and whole body. Pregnancy status will be assessed on ALL females ages 18 to 59 through urine analysis if they have reproductive potential. If the result of the pregnancy test is positive you will be excluded from the examination. You will be excluded if you say you are pregnant even if the pregnancy test was negative. You will also be asked for a small sample (about one teaspoon) of blood taken from the vein to check your diabetes control with an A1C test if a blood sample has not been taken in the past 3 months.

Time Commitment:
If you agree to take part, the whole exam will take about 4 to 5 hours.

Benefits:
You or your family may receive no direct benefit from being in this study, other than knowing your blood sugar, cholesterol, and triglyceride and complete blood count levels. However, your participation may lead to a better understanding of liver disease, its complications, and related diseases like diabetes and obesity. A better understanding may then help to prevent or lower the problems caused by these diseases.

Risks and/or Discomforts:
All tests and examinations will be carried out by trained personnel such as medical doctors, nurses or technicians. The risks involved with study participation are minimal. You may experience some small discomfort when the blood is drawn and a small black and blue spot may develop at the site where the blood was obtained. If this occurs, it need not cause any alarm and will usually go away within 2 or 3 days. Applying local heat may help it go away sooner. Because of the nature of the questions that we will ask you, there is a slight risk of emotional discomfort. For example, there are questions about mental health that could make some people uncomfortable. Although the interviews involve no specific physical risk or discomfort, you may feel uncomfortable. Experienced interviewers will conduct the interview. You may choose not to answer any of the questions. If you or any member of your family has concerns about this study, you may discuss them with the person that is conducting the interview.

By taking part in this study, there is a risk of the possible loss of your privacy (name, address, etc.). No information will be shared with others outside of this research project unless otherwise specified. Although not intended, loss of your privacy could include discovering information that may impact your family, paternity status, insurability, employability, or immigration status.

Alternatives:
If you are concerned about any of the procedures described above, the only alternative is not to take part in the study.

Study Withdrawal:
There may be instances where the PI may withdraw you from the research study. Reasons that your taking part in this study may be stopped include: The principal investigator, the study doctor, the federal government, or CPHS stops or suspends the research of liver disease and liver-related disorders or stop this genetic research study.

During and after the study, you will have the right to have your sample destroyed at any time. If you decide to have your sample destroyed, any data or analysis that were done before the request cannot be removed; however no further testing will be done and all remaining samples will be destroyed. This means that if you decide to withdraw from this additional research, your data collected prior to withdrawal may still be used up to the point of withdrawal.

Confidentiality:
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 remind confidential to every extent of the law. A special number will be used to identify you in the study and only the investigator or those collecting the information will know your name. The information will be kept in a secure location. Please understand that representatives of the Food and Drug Administration (FDA), the Committee for the Protection of Human Subjects, and the

sponsor of this research may review your research records for the purposes of verifying research data, and will see personal identifiers.

The human derived biological sample (HDBS) bank administered by The University of Texas Health Science Center Houston (UTHSC-H) will remain with UTHealthunless UTHealthagrees to release and/or transfer the samples. Please be aware that if the PI leaves the University, the samples within the HDBS bank will remain the property of UTHealth School of Public Health . The University's ownership includes the right to transfer ownership to other parties, including commercial sponsors.

The Principal Investigator, Susan P. Fisher-Hoch, or the subject does not have any ownership or proprietary interest in the HDBS.

UTHealthwill require anyone who works with your samples to agree to hold the information and any results in confidence.

Information about how this study will use your Protected Health Information (PHI)

Taking part in the study will require the researchers to have and to use private information about you and your health. It will also be necessary for the researchers to permit other groups to see records that contain information about you and your health. The federal privacy regulations only permit the researchers to collect, use or share your identifiable health information if you give them your permission to do so.

Research policies require that private information about you be protected and this is especially true for your health information. However, the law sometimes allows or requires others to see your information. The information given below describes how your privacy and the confidentiality of your research records will be protected in this study.

What is Protected Health Information (PHI)?

Protected Health Information is information about a person's health that includes information that would make it possible to figure out who the person is. According to the law, you have the right to decide who can see your protected health information. If you choose to take part in this research study, you will be giving your permission to the investigators and the research study staff (individuals carrying out the study) to see and use your health information for the study. In carrying out this research, the health information we will see and use about you will include*:*

- your medical history and blood work,
- pathology and results of medical tests,
- information from interviews or from questionnaires,
- demographic information like your age, marital status, the type of work you do and the years of education you have completed.

We will get this information from the study procedures that will be done, by asking you, asking your doctor, and/or by looking at your chart at UTHealth School of Public Health in Brownsville

How will your PHI be shared?

Because it is research, we will be unable to keep your PHI completely confidential. We may share your health information with people and groups involved in conducting and overseeing this research study including:

- The sponsor of the study.
- The members of the local research team and collaborators; and

- The Institutional Review Board and the Compliance Office of the University of Texas Health Science Center at San Antonio and Houston, and other groups that oversee how research studies are carried out.

Parts of your PHI may be photocopied and sent to a sponsor or data coordinating center, as appropriate, or it may be transmitted electronically, such as by e-mail or fax.

Some groups receiving your PHI may not be obligated to keep it private. They may pass information on to other groups or individuals not named here.

How will your PHI be protected?
In an effort to protect your privacy, whenever possible, the study staff will use code numbers instead of your name, to identify your health information. Initials and numbers will be used on any transmission of your study records, and other study materials containing health information that are sent outside of University of Texas Health Science Center at Houston for review or testing. If the results of this study are reported in medical journals or at meetings, you will not be identified. Your PHI will have identifiers if added to the Rio Grande Valley Information Exchange or the Texas Cancer Registry or to other providers as specified below.

Do you have to allow the use of your health information?
You do not have to allow (authorize) the researchers and other groups to see and share your health information. If you choose not to let the researchers and other groups use your health information, there will be no penalties.

After you enroll in this study, you may ask the researchers to stop using your health information at any time. However, you need to say this in writing, by signing the opt-out form. If you tell the researchers to stop using your health information, the study staff will stop collecting new health information from you and about you for this study. However, the study staff will continue to use the health information collected up to the time they sign the form.

Can you ask to see the PHI that is collected about you for this study?
The federal rules say that you can see the health information that we collect about you and use in this study. Contact the study staff if you have a need to review your PHI collected for this study.

How long will your PHI be used?
By signing this form, you agree to let us use and disclose your health information for purposes of the study. The permission to use your personal health information expires when the research ends and all required study monitoring is over.

Your Personal Information and Results:
The results will not be given to members of your family, your personal physician, or other third parties unless otherwise specified.

All results from the examinations will be explained to you and, if you request, will be sent to your doctor.

Authorization for the Use and Disclosure of Protected Health Information (PHI)

Sharing information with providers through Rio Grande Valley Health Information Exchange (RGV HIE) helps clinicians provide better care for patients by not duplicating tests and having more complete information about the patient's medication and other treatment history.

Participants may choose not to share information through the health information exchange. If you decide not to share information, you will be asked to sign an "opt out" form.

"The ultimate goal and purpose of the Texas Cancer Registry (TCR) is to collect, maintain, and disseminate the highest quality cancer data that will contribute towards cancer prevention and control, improving diagnoses, treatment, survival, and quality of life for all cancer patients".

I hereby authorize UTHealth School of Public Health to access and/or release the following information from the medical records of the participant identified above to the Rio Grande Valley Health Information Exchange, the Texas Cancer Registry, and the Centers for Disease Control and Prevention's (CDC) National Center for Health Statistics.

I understand I have the right to revoke this authorization in writing at any time except to the extent that action has been taken in reliance upon it. I understand that I may revoke this authorization by sending, via mail or facsimile, a written notice to the following individuals/organizations stating my intent to revoke this authorization.

___ **Rio Grande Valley Health Information Exchange**
1816 East Harrison Ave., Ste. A
Harlingen, Texas 78550
Phone: 956-622-5801 Fax: 866-650-8035

___ TDSHS- Texas Cancer Registry
Department of State Health Services
P.O. Box 149347
Austin, TX 78714-9347

___ Centers for Disease Control and Prevention (CDC)
National Center for Health Statistics
3311 Toledo Rd
Hyattsville, MD 20782-2064

___ Other Known Health Provider

_____

_____

The information to be released to the Principal Investigator will include (Please Check appropriate box)

___ Complete Clinical Records

___ Other _____

I understand that UTHealth School of Public health may not withhold or condition treatment based on my completion of this authorization form.

I understand that the records used and disclosed pursuant to this authorization form may include information relating to: HIV infection, treatment for or history of drug or alcohol abuse, or mental or behavioral health or psychiatric care.

In the case of an adverse event related to or resulting from taking part in this study, I authorize the researchers listed above to access test, treatment and outcome information about the adverse even from the treating facility.

This Authorization will expire six (6) years after the end of the study.

Cost, Reimbursement, and Compensation:
You will receive $50 for the completion of Visit 1 and $50 for the completion of each 2-year follow-up visit.

If you are going to receive payment for taking part in this study, you will be asked to complete a W-9 form that will be sent to the UT accounting department. If you receive more than $600 from UT Health for being in research studies this year, you will be given a 1099-MISC form for tax reporting purposes.

If you decide to allow your samples to be stored, you are providing your sample to be used by the University of Texas Health Science Center at Houston. UTHealth owns any use of the results, treatments or inventions that can be made from the research. You will not be paid for any use of your samples or results.

In Case of Injury:
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. However, all needed facilities, emergency treatment and professional services will be available to you, just as they are to the community in general. You should report any such injury to Rocio Uribe at (956) 755-0695 and also call the Committee for the Protection of Human Subjects at (713) 500-7943.

Questions:
If you have any questions regarding this study or results of the tests which have been done on your blood, please feel free to contact the same phone numbers listed above. Also you can contact Susan Fisher-Hoch, MD, Principal Investigator, office located at the UTHealth School of Public Health in Brownsville, SPH Building S100, Brownsville, Texas 78520, or call (956) 755-0605

Signatures:
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 satisfactorily 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 will be given to you.

_____	_____	_____
Signature of Subject	Date	Time

_____
Printed Name of Subject

_____ _____ _____
Signature of Person Obtaining Consent Date Time

_____
Printed Name of Person Obtaining Consent

*This study (**HSC-SPH-15-0167**) has been reviewed and approved by the Committee for the Protection of Human Subjects (CPHS) for the University of Texas Health Science Center and IRB-HS-UTB/TSC-#2005-045-IRB-1. For any inquires regarding research subject's rights, or to report any research-related injury, call the CPHS at (713) 500-7943.*