COMPOUND AUTHORIZATION AND CONSENT FOR PARTICIPATION IN A RESEARCH PROJECT
200 FR. 1 (2016-2)

YALE UNIVERSITY SCHOOL OF MEDICINE – YALE-NEW HAVEN HOSPITAL
Study Title: Brain effects of opiate agonist and antagonist-open label study
Principal Investigator: Paul Geha, MD
Funding Source: Yale University School of Medicine, Psychiatry Department

Invitation to Participate and Description of Project

Suggested Text:

You are invited to participate in a research study designed to look at the effect of morphine, on brain response to food. Morphine is a medication given to patients in severe pain; You have been asked to participate because you suffer from pain. 75 participants will be recruited for this study; 45 of them will have pain and 30 will not.

In order to decide whether or not you wish to be a part of this research study you should know enough about its risks and benefits to make an informed decision. This consent form gives you detailed information about the research study, which a member of the research team will discuss with you. This discussion should go over all aspects of this research: its purpose, the procedures that will be performed, any risks of the procedures, possible benefits and possible alternative treatments. Once you understand the study, you will be asked if you wish to participate; if so, you will be asked to sign this form.

Description of Procedures

You may be eligible for this study if you currently are healthy or have pain for more than 6 weeks. You must be in good physical health. You will be asked to come for 2 visits and will receive morphine on visit 2.

Intake session
At an initial intake session of about 2.5 hours at The John B. Pierce Laboratory, you will be asked to complete some questionnaires and interviews, undergo body measures and provide a saliva sample to confirm your eligibility for this study.

Blood sample
You will be asked not to eat or drink anything (except water) for 2 hours prior to the study start time. A licensed phlebotomist will obtain one sample of about 2 tablespoons of blood from a vein in your arm or hand.

Questionnaires, and Psychiatric assessments:

APPROVED BY THE YALE UNIVERSITY IRB 8/7/2018 VALID THROUGH 8/8/2019

You will be asked to fill out questionnaires aimed at assessing for example your cigarette, alcohol or drug use, eating behaviors, physical activity level, dieting behaviors or personality.
We will also conduct interviews assessing your current and past alcohol and illegal abuse/dependence, nicotine dependence, mood disorders, and alcohol and cigarette use.

Body measures

Body measures including body composition (BodPod measurement), height, weight, waist circumference, and hip circumference. You will be asked to participate in the BodPod measurement. The Bod Pod is a large self-contained testing chamber with a glass window that measures your body volume and uses it to calculate body composition. The assessment is simple, non-invasive, and takes only about 5 minutes. For the measurement to be accurate we ask that you do not eat, drink, or exercise for at least 2 hours before your session. Additionally, your clothing must be skin tight. We will provide spandex shorts and tops for this purpose (that are washed for every subject), or you can bring your own skintight sports or swimming clothing. Three consecutive 50-second measurements are taken during which the door of the chamber will be closed. You will hear sounds that indicate the pressure changes that are used to make the measurement. In between the measurements the experimenter opens the door. Some people may feel uncomfortable or anxious in the enclosed chamber of the BodPod. The experimenter can see you at all times in the BodPod and will show you the alarm button inside the BodPod that will interrupt the measurement in case you feel anxious. If your body measures do not match our inclusion criteria, you will be excluded from further participation.

Saliva sample

You will also be asked to provide a DNA sample by delivering some saliva in a cup. The purpose of collecting this sample is to understand the genetic factors that may influence your reactivity to tastes, odors, and food items.

Alcohol and Drug Screening

You are free to drink as usual during the study, except that we ask that you refrain from alcohol use the day before any assessment at The John B Pierce Laboratory. We will monitor your breath alcohol level by asking you to blow into a meter, called a breathalyzer, and also collect a urine sample to detect the presence of various drugs.

If you are female: we do not wish to include females who are or may be pregnant. Therefore, all females of childbearing potential will be given a urine pregnancy test. Results of the pregnancy test will be given to you only and will remain confidential. If the results indicate you are pregnant you will be excluded from the study. We also require that you are on a reliable form of birth-control throughout the remainder of the study

Your results from the blood sample and your responses to the questionnaires may exclude you from the study, however they will remain confidential. If you test positive for alcohol, drug use, or pregnancy the session will be cancelled and you will be excluded from further participation. We do not record the results of these tests.

fMRI mock scan training

At the JBP there is a mock MR-scanner, which does not contain the strong magnet found in a real MRI scanner, but instead is an identical replica of the real scanner. You will be asked to lie still on the MRI patient table and your head will be placed on a specially-designed holder. Your head will be cushioned by a firm foam pillow and you will be fitted with the mouthpiece. You will receive different milkshakes through plastic beverage tubing attached to a mouthpiece on the head holder. The mouthpiece will be sterilized and new beverage tubing will be used for each subject. The mouthpiece will be positioned above your head so that the end rests comfortably on the tip of your tongue. The placement of the mouthpiece in your mouth will not interfere with breathing or swallowing. However, you may be asked to refrain from swallowing during certain parts of the experiment (never longer than 15 seconds). The table will then slide into the enclosed space of the mock MR scanner, which is a long tube. Some people become tired, uncomfortable or claustrophobic (uncomfortable in the small space) inside the mock MR scanner. You will be inside the mock MR scanner up to 30 minutes. The goal of the training session is to familiarize you with the procedure and make sure that you are comfortable with the mouthpiece, and swallowing small amounts of liquids while lying on your back. Also, if you are unable to hold your head very still or if you are uncomfortable inside the mock MR scanner, you may withdraw from the study or be asked to withdraw from the study (and still receive a pro-rated payment for your participation).

Computer based decision-making games:

You will be asked to play computer-based games. In one game you will be play with fake money. In two other games you might end up earning additional bonus payment in real money. You will be presented with visual and auditory stimuli on a computer. In some trials you may be asked to make choices between the stimuli presented to you by pressing buttons on a keyboard or a response box. For example, you may be asked to choose between a certain winning of $5 or betting on winning $50 or losing $10.

Baseline Assessment Session

Blood sample

You will be asked not to eat or drink anything after your last meal the night before (except water) your appointment, so we can assess your blood for naturally occurring chemicals that your body produces regularly as well as your blood glucose levels. A licensed phlebotomist will obtain one sample of about 2 tablespoons of blood from a vein in your arm or hand.

Body measures

As in body measures for the intake session above.

Computer tasks:

You will participate in 2 different computer tasks. During these tasks you will look at scales or words projected onto a computer screen. You will be asked to make ratings relative to these words or scales. This assessment will take about 30 minutes.

Questionnaires:
You will also be asked to fill out questionnaires aimed at assessing your cigarette, alcohol or drug use, inventory of bodily pain, eating behaviors, physical activity level, dieting behaviors, mood or personality.

Tasting session:
You will be asked to sample various food stimuli. You will also be asked to make ratings about your perceptions of these stimuli. For instance, you may be asked to judge the intensity, pleasantness or sweetness of the food. All stimuli are commercially available products, or made from commercially available products. You will sample these stimuli from cups.

fMRI scan session
The fMRI session will take place at the MRRC (the Anlyan Building) at Yale University. Participation in the fMRI scan session(s) is dependent upon the fMRI training session(s). For example, it may be decided that you are not sufficiently comfortable in the enclosed environment of the MR simulator. During the actual scanning session you will spend a maximum of 90 minutes inside the fMRI scanner. However, the whole session will take about 3 hour because we explain the procedure, collect ratings about your level of hunger and about your perception of the stimuli. It also takes time to get you set up in the scanner and to take you out of it.

We will monitor your breath alcohol level by asking you to blow into a meter, called a breathalyzer, collect a urine sample to detect the presence of various drugs, and if you are a female perform a pregnancy test. If you test positive for alcohol, drug use, or pregnancy the session will be cancelled and you will be excluded from further participation. We do not record the results of these tests.

Functional MRI is a type of brain scan that uses magnetic fields and radio waves to record changes in blood flow in your brain while you perform certain tasks.

In order to make sure the MRI procedure will be safe, you will first be asked to fill out a screening form prior to participating in this study. It is important that you tell the experimenters in this study if you have any history of:

1. Metal fragments in your eyes or face.
2. Implantation of any electronic devices, such as (but not limited to) cardiac pacemakers, cardiac defibrillators, cochlear implants or nerve stimulators.
3. Surgery on the blood vessels of your brain.
4. Claustrophobia (fear of enclosed places).

To ensure that you bring no metal objects into the scanning room you will be asked to change into hospital scrubs in a private changing room. Your clothes and personal belongings will be brought with you to the scanner and will remain under the watch of study personnel at all times.

You will be given instructions outside the MR scanner about the scanning. Next you will be asked to lie still on the MR patient table and your head will be placed on a specially-designed holder, enabling us to record the imaging signal. Your head will be cushioned by a firm foam

pillow. If applicable, the mouthpiece and or nasal mask will be placed into position. In addition we will place a few sensors to measure physiological signals in the scanner. To measure breathing we will wrap an elastic Velcro band around your chest, which will not interfere with breathing. We will also tape three sensors onto your thumb, index, and middle finger of your left hand to measure pulse and skin responses. We will also loosely tie expanding respiratory bellows around your thyroid cartilage to measure swallowing. This will not interfere with breathing or swallowing. However, if any of these sensors cause you discomfort we will remove them before proceeding with the scan. The table will then slide into the enclosed space of the MR scanner, which is a long tube. The MR scanner makes loud banging noises while making the fMRI pictures, so you will use ear plugs and/or specially designed headphones to reduce the noise. The experimenters will be able to talk with you through an intercom system to tell you how the study is going. The earplugs or headphones should not interfere with your ability to talk with the experimenters or your performance in the study. The stimuli (e.g. tastes) will then be delivered as described above (e.g. mouthpiece) while the MR scanner is running.

Some people become tired, uncomfortable or claustrophobic (uncomfortable in the small space) inside the MR scanner. The information obtained from the MR scanner is only useful if you are able to complete the entire fMRI session and hold your head very still the entire time (up to 60 minutes). Therefore please let the investigators know if you are uncomfortable in any way as soon as possible after the imaging session begins.

The fMRI pictures obtained in this study will not be in a form readable by either you or your physician. Therefore we will not give you or your doctor a copy of the fMRI pictures or the results of your individual study. While a radiologist does not formally review the fMRI pictures in this study, if in the course of processing the images we notice any abnormality that would be potentially relevant to your health, we will tell you and a physician you designate.

On the same day after the fMRI scanning session we will proceed as described below; You will receive one dose of oral 30 mg Morphine

Oral Morphine Session

First you will undergo an fMRI scanning session as described above. Then, depending on the day you will be asked to take one oral dose of 30 mg Morphine. First, your heart rate, respiratory rate, blood pressure, and oral temperature will be registered. The doctor on the study will perform neurologic and brief mental exams on you. Next you will be given one dose of 30 mg oral morphine with a cup of water and wait for 30 minutes. After 30 minutes have passed you will be asked to undergo another 30 minutes of scanning. During this time tastes will be delivered again. After the second scan you will be asked to stay for an additional 2 hours for monitoring. During this time your heart rate, respiratory rate, blood pressure, and oral temperature will be registered at least twice. The doctor on the study will perform neurologic and brief mental exams on you at least twice again to make sure you are not developing side effects from the medication.

A description of this clinical trial will be available on *http://www.ClinicalTrials.gov*, as required by U.S. Law. This Web site will not include information that can identify you. At most, the Web site will include a summary of the results. You can search this Web site at any time.

Risks and Inconveniences

Morphine
Morphine is a medication used to ease severe pain. After one dose of morphine 30 mg you might feel the following: feeling sleepy, dizziness, dry mouth, upset stomach or throwing up, hard stools (constipation), headache, anxiety, feeling tired or weak, belly pain, muscle or joint pain (including back pain) or sweating a lot.
However, because we are giving you **one dose only** if these side effects occur they may last few hours only.

Even though it may be rare, some people may have very bad and sometimes deadly side effects when taking a drug. Signs of an allergic reaction, like rash; hives; itching; red, swollen, blistered, or peeling skin with or without fever; wheezing; tightness in the chest or throat; trouble breathing or talking; unusual hoarseness; or swelling of the mouth, face, lips, tongue, or throat, very bad dizziness or passing out, chest pain or pressure or a fast heartbeat, trouble breathing, slow breathing, or shallow breathing, noisy breathing, seizures, very hard stools (constipation), feeling very tired or weak, feeling very sleepy, mood changes.
A very bad and sometimes deadly health problem called serotonin syndrome may happen if you take this drug with drugs for depression, migraines, or certain other drugs. Call your doctor right away if you have agitation; change in balance; confusion; hallucinations; fever; fast or abnormal heartbeat; flushing; muscle twitching or stiffness; seizures; shivering or shaking; sweating a lot; very bad diarrhea, upset stomach, or throwing up; or very bad headache. Taking strong pain drugs like this drug may lead to a rare but very bad adrenal gland problem. Call your doctor right away if you have very bad dizziness or passing out, very bad upset stomach or throwing up, or if you feel less hungry, very tired, or very weak.

MRI
MRI is considered to be among the safest ways to examine the human body. They use magnetism and radio waves, not x-rays, to measure chemicals and take pictures of various parts of the body. The United States Food and Drug Administration (FDA) has set guidelines for magnet strength and exposure to radio waves, and we carefully observe those guidelines. For your exposure in this study, no bad effects have been seen. This study has no painful parts. You will be watched closely throughout the study. Some people may feel uncomfortable or anxious during the MRI. If this happens to you, you may ask to stop the study at any time and we will take you out of the MR scanner. On rare occasions, some people might feel dizzy, get an upset stomach, have a metallic taste or feel tingling sensations or muscle twitches. These sensations usually go away quickly but please tell the research staff if you have them.

MRI poses some risks for certain people. If you have a pacemaker or some metal objects inside your body, you may not be in this study because the strong magnets in the MR scanner might harm you. Another risk is a metallic object flying through the air toward the magnet and hitting you. To reduce this risk we require that all people involved with the study remove all metal from their clothing and all metal objects from their pockets. Nothing metal can be brought into the magnet room at any time. Also, once you are in the magnet, the door to the room will be closed so that no one from outside accidentally goes near the magnet.

We want you to read the questions on the MR Safety Questionnaire and answer them very carefully. Those questions are for your safety. Take a moment now to be sure that you have read the MR safety sheet and be sure to tell us any information you think might is important. Even if you think that it is probably okay, we would rather have you ask us to make sure.

This MR study is for research purposes only and is not in any way a clinical scan to diagnose diseases for you. The scans in this study are not designed for diagnosis. The primary investigator, the lab, the MR technologist, and the Magnetic Resonance Research Center are not qualified to interpret the MR scans and cannot give you or your doctor a diagnostic evaluation of the images. If we see something on your scan that might be medically significant, we will ask a radiologist or another physician to review the relevant images. If that person recommends that you should seek medical advice, then the primary investigator or consulting physician will contact you, talk with you about the situation, and recommend that you seek medical advice as a precautionary measure. At that point, the decision to seek advice or treatment is completely up to you and your doctor. If your doctor wants to pursue additional MR images, the research scans from this study will not be available, and new scans that are appropriate for medical diagnosis will need to be done. The researchers for this project, the consulting physician, the Magnetic Resonance Research Center, and Yale University are not responsible for any exam or treatment that you receive based on these findings.

The various sensors that we use to measure physiological signals in the scanner will not interfere with breathing or swallowing and do not pose any anticipated risk. However, if any of these sensors cause you discomfort we will remove them before proceeding with the scan.

Pregnancy

MR scans could be damaging for a developing fetus. If you should become pregnant, you should report this to us, your health care professional and physician immediately. If you get pregnant during the study, you must stop the participation immediately. During the entire duration of this study you will need to have a reliable method of birth control, and we perform pregnancy tests for all female subjects along with toxicology tests during assessment and intake.

Alcohol and drug screening

You may be worried about hygiene and disclosing test results. For the breathalyzer we will use a clean, separately wrapped mouthpiece for each subject. Bottles containing urine specimens will be not be labeled and will be immediately discarded after testing. The results from these tests are not recorded.

Blood sample
Potential risks associated with blood sampling include infection from failure to observe proper sterile conditions, and hematoma from careless technique. The latter may be associated with some discomfort, but presents very little danger to your welfare. In any case, all blood draws will be performed by a skilled phlebotomist.

BodPod
There are no known risks associated with the BodPod measurement. However, some people may feel uncomfortable or anxious in the enclosed chamber of the BodPod. After each of the three 50-second measurements the experimenter will open the door. The experimenter can see you at all times in the BodPod and will show you the alarm button inside the BodPod that will interrupt the measurement if you feel anxious.

Food samples
There are no known risks associated with drinking any of the liquids and beverages or eating any of the foods that are used in this research study. All are commercially available products.

Questionnaires, computer tasks, and other assessments
It is possible that the interviews may cause you distress or concern. For example, it may be distressing to disclose information about psychiatric difficulties in the structured interviews. It is also possible that you may become frustrated with some of the impulsivity or cognitive assessments. If you meet diagnostic criteria for any psychiatric disorder you will be referred for treatment. If you become distressed or fatigued during assessments, the assessor will halt the procedure and take a break. The session will only recommence when and if you feel capable of continuing.

Genotyping:
If you provided a saliva sample for genotyping, we will be getting personal information from you. There is always the possibility that someone who is not authorized might see it, though this has not happened previously. We take the following precautions to prevent any unauthorized persons from accessing to the information you give us:

Any information you give us will be kept strictly confidential. Participant information is maintained in locked files or computer files requiring a password and data are identified only by a code number/letter combination. Only the primary investigator and research staff and have access to these files. All research materials will be held in strictest confidence until the study is completed, at which point all identifying material will be destroyed. When the results of the research are published or discussed in conferences, no information will be included that would reveal your identity unless your specific consent for this activity is obtained. All DNA samples will be prepared, stored, and analyzed at The John B. Pierce Laboratory. Then, the DNA samples will be analyzed in this lab using standard genotyping procedures. Identifying data will be kept on the password-protected server for a period of seven years. After seven years, the identifying data will be destroyed.

You may be worried about the potential risk for detection of any carriers of a disease or condition gene. However, we are not looking for disease or condition genes. We will only gather data about commonly occurring DNA variations. Consequently, a medical interpretation of your DNA sample cannot be made.

Under some circumstances, it can be a risk for genetic information to be known by the subject or others. Variation in some genes is known to be directly related to risk of certain illnesses. In some cases, knowledge of genetic information could have negative psychological consequences or could affect access to or retention of certain benefits or entitlements. For example, the information could potentially be used against you if it were revealed to insurance companies or potential employers. However, you will not get the results of the DNA portion of the study nor will the results be made available in your medical record. Additionally, we will take precautions to ensure that confidentiality is maintained and that genetic information is not unintentionally disclosed to inappropriate third parties. There is a federal law called the Genetic Information Nondiscrimination Act (GINA). In general, this law makes it illegal for health insurance companies, group health plans, and most employers, except those with less than 15 employees, to discriminate against you based on your genetic information. However, it does not protect you against discrimination by companies that sell life insurance, disability insurance, or long-term care insurance.

At any time you may withdraw your saliva or genetic information from the study by contacting the PI (contact information can be found on the last page of this form), after which we will destroy the biological material and any paper or digital records containing your genetic information

Benefits

Participation in this study may have direct benefits. If you have pain and receive morphine you might experience some short-term relief of your pain.

There are also benefits for the society at large. Obesity has now reached epidemic proportions in the United States. The increasing prevalence of obesity and its strong relation to a number of chronic conditions and cancer escalates the public health significance of this disease. Addiction to pain killers is very costly problems to patients and society. Understanding how the brain reacts to them will clear the way to understanding long-term side effects such as dependence and obesity.

Economic Considerations

You will not have to pay for any of the procedures in which you participate as part of this research project. You will receive the morphine for free.
The remuneration is as follows:

Type session:	payment:	frequency	Total
behavioral assessment	$ 80	x 1	= $ 80

fMRI scan with milkshake	$ 100 *	x 2	= $ 200
Computer Games	$100	x _____	= $100_____
		Subtotal:	= $ 280
Accumulated Earning Bonus	$		= $ variable___
Completion Bonus	$ 50		= $ 50
		Total payment:	**= $ 430**

* If you spend up to 15 minutes in the scanner but do not complete the study, you will be paid $50 instead. If you spend more than 15 minutes, you will receive the full $100 regardless of study completion.

If at anytime you or the researcher chooses to withdraw you from the study, you will be compensated for the sessions completed up until that time.

Treatment Alternatives/Alternatives

If you are selected because you are a healthy subject there is no alternative, except to decline participation in the study. If you are selected because you have pain you can seek pain treatment with your regular physician. Many behavioral (e.g. exercise, meditation) treatments as well non-addiction inducing medications are available for pain.

Confidentiality

Any identifiable information that is obtained in connection with this study will remain confidential and will be disclosed only with your permission. Examples of information that we are legally required to disclose include abuse of a child or elderly person, or certain reportable diseases. When the results of the research are published or discussed in conferences, no information will be included that would reveal your identity unless your specific consent for this activity is obtained.

We understand that information about you obtained in connection with your health is personal, and we are committed to protecting the privacy of that information. If you decide to be in this study, the researcher will get information that identifies you and your personal health information. This may include information that might directly identify you, such as your name, address, telephone number, e-mail address, and birthdate. This information will be de-identified at the earliest reasonable time after we receive it, meaning we will replace your identifying information with a code that does not directly identify you. The principal investigator will keep a link that identifies you to your coded information, and this link will be kept secure and available only to the PI or selected members of the research team. Any information that can identify you will remain confidential. Participant information is maintained in locked files or in computer files that are password protected, and data from individuals (computer files and hard copy

versions) are identified only by code. Only the primary investigator and research staff, the Yale HIC, and the National Institute of Health, which sponsors the study, will have access to these files. These individuals are required to keep all information confidential. Seven years after completion of the study the identifying data will be deleted by zeroing with software as in accordance with policies and procedures as determined by Yale University. When the results of the research are published or discussed in conferences, no information will be included that would reveal your identity unless your specific consent for this activity is obtained. The information about your health that will be collected in this study includes:

- Records about phone calls made as part of this research
- Records about your study visits
- verbal, written, or computerized ratings of sensory stimuli, questionnaires, computer tasks and interviews
- images of your brain
- records about levels of chemicals in blood
- genetic information

Information about you and your health which might identify you may be used by or given to:

- Representatives from Yale University, the Yale Human Research Protection Program and the Yale Human Investigation Committee (the committee that reviews, approves, and monitors research on human subjects), who are responsible for ensuring research compliance.
- Those individuals at The John B Pierce Laboratory who are responsible for the financial oversight of research including billings and payments
- The Principal Investigator Paul Geha
- Co-Investigators and other investigators
- Study Coordinator and Members of the Research Team
- the National Institutes of Health (NIH)

These individuals are required to keep all information confidential.

If you decide to take part in this research study, you will be required to have urine drug testing conducted. We have obtained a Certificate of Confidentiality (CoC) issued by the NIDA. 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, except as explained below.

The protection offered by the CoC does not stop us from voluntarily reporting information about suspected or known sexual, physical, or other abuse of a child or older person, or a participant's threats of violence to self or others. If any member of the research team is given such information, he or she will make a report to the appropriate authorities. When the CoC is obtained, we will inform all active study participants.

Because this research is sponsored by the Department of Health and Human Services through NIDA, staff from that and other DHHS agencies may review records that identify you only for

audit or program evaluation. They cannot report anything that would harm you or other research subjects.

Even when a CoC is in place, you and your family members must still continue to actively protect your own privacy. If you voluntarily give your written consent for anyone to receive information about your participation in the research, then we may not use the CoC to withhold this information.

By signing this form, you authorize the use and/or disclosure of the information described above for this research study. The purpose for the uses and disclosures you are authorizing is to ensure that the information relating to this research is available to all parties who may need it for research purposes.

All health care providers subject to HIPAA (Health Insurance Portability and Accountability Act) are required to protect the privacy of your information. The research staff at The John B Pierce Lab, the Yale School of Medicine and Yale New Haven Hospital are required to comply with HIPAA and to ensure the confidentiality of your information. Some of the individuals or agencies listed above may not be subject to HIPAA and therefore may not be required to provide the same type of confidentiality protection. They could use or disclose your information in ways not mentioned in this form. However to better protect your health information, agreements are in place with these individuals and/or companies that require that they keep your information confidential.

You have the right to review and copy your health information in your medical record in accordance with institutional medical records policies. However, by deciding to take part in a single or double blinded treatment study and sign this permission form, you will not be allowed to look at or copy your study related information until after the research is completed.

This authorization to use and disclose your health information collected during your participation in this study will never expire.

In Case of Injury

If you are injured as a result of your participation in this study, treatment will be provided. You or your insurance carrier will be expected to pay the costs of this treatment. No additional financial compensation for injury or lost wages is available. You do not give up any of your legal rights by signing this form.

Voluntary Participation and Withdrawal

You are free to choose not to participate and if you do become a subject you are free to withdraw from this study at any time during its course without loss of compensation for the time completed. If you choose not to participate or if you withdraw, it will not harm your relationship with the study doctors, the John B. Pierce Laboratory, or with Yale-New Haven Hospital.

If you sign this authorization, allowing the researchers to use your study information, and you change your mind, please understand that the researchers may continue to use information from your participation that has already been collected. To withdraw from the study, you can call a

member of the research team at any time and tell them that you no longer want to take part. This will cancel any future appointments *(if applicable)*. If you do not want the researchers to continue to use the information they have already collected, you must also follow up your phone call by sending a written notice to revoke this authorization to the principal investigator, Dr. Dana M Small, The John B. Pierce Laboratory, 290 Congress Ave, New Haven, CT 06519.

This authorization to use and disclose your health information collected during your participation in this study will never expire unless and until you change your mind and revoke it.

The researchers may withdraw you from participating in the research if necessary. You may be withdrawn from the study if you are unable to complete the any portion of the study for whatever reason (e.g. discomfort or technical difficulties).

Questions

We have used some technical terms in this form. Please feel free to ask about anything you don't understand and to consider this research and the consent form carefully – as long as you feel is necessary – before you make a decision.

Authorization

I have read (or someone has read to me) this form and have decided to participate in the project described above. Its general purposes, the particulars of my involvement and possible hazards and inconveniences have been explained to my satisfaction. My signature also indicates that I have received a copy of this consent form.

Name of Subject:_____

Signature:_____

Relationship:_____

Date:_____

_____ _____
Signature of Principal Investigator Date

or

_____ _____
Signature of Person Obtaining Consent Date

If you have further questions about this project or if you have a research-related problem, you may contact the Principal Investigator *Dr. Paul Geha, MD, (203)903-4334*.

If, after you have signed this form you have any questions about your privacy rights, please contact the Yale Privacy Officer at 203-432-5919. If you would like to talk with someone other than the researchers to discuss problems, concerns, and questions you may have concerning this research, or to discuss your rights as a research subject, you may contact the Yale Human Investigation Committee at (203) 785-4688.