Research Informed Consent

Title of Study: Effects of THC on Retention of Memory for Fear Extinction Learning in PTSD: R61 Study

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Purpose

You are being asked to be in a research study of emotional processing and trauma experience because you have experienced a traumatic event and you may or may not have developed posttraumatic stress disorder (PTSD) as a result. PTSD can develop after experiencing a traumatic event(s) and is characterized by unwanted memories of the trauma(s) through flashbacks or nightmares, avoidance of situations that remind you of the event, difficulty experiencing emotions, loss of interest in activities you used to enjoy, and increased arousal, such as difficulty falling asleep or staying asleep, anger, and feeling constantly tense and "on guard." This study is being conducted at Wayne State University. The estimated number of study participants to be enrolled at Wayne State University is about 175. **Please read this form and ask any questions you may have before agreeing to be in the study.**

In this research study, we are going to look at how a type of drug called cannabinoids are related to the processing of fear signals and the pattern of activity in the brain. The drug you may be given is called dronabinol, which is FDA-approved, and the drug is administered by the principal investigator, Dr. Rabinak. The information gained from this study could lead to the development of new treatments for persons who suffer PTSD.

Study Procedures

If you agree to take part in this research study, you will be asked to participate in the following study visits:

Visit #1: Questionnaires, Screening, and Orientation: You have completed some screening questions over the phone or in an online survey and were scheduled to come into our lab for a screening visit. The person you meet with will explain the study and will answer any questions you may have about the research. If you decide to participate, you will be asked to sign this form. During this study, Dr. Rabinak and her research team will collect information about you for the purposes of this research. Some of the questions you will be asked will be of a sensitive and personal nature (for instance, questions about your mental health, drug use, and contraceptive use). We ask that you answer all

questions as honestly as possible; however, if any question makes you feel uncomfortable you may choose not to answer it. All the information collected in the study will be kept in a locked cabinet and/or will be stored in a secure location electronically and only Dr. Rabinak and her research team will have access to the information. Some information collected in the study will be stored electronically The answers you provide will be used for research purposes only, and your name will not be used in any published research articles.

If you decide to participate, you will first fill out a packet of forms. These forms will ask about your race and ethnic background, your use of drugs and alcohol and your physical and mental health. After you complete these forms, a member of the research team will interview you. During this interview, the researcher will ask you questions about your medical history, such as whether you have ever had certain symptoms or illnesses. This will also include questions about your mental health history. He or she will also ask about any medications that you are currently taking, as well as whether you have used various drugs and how often you have used them. If you are a woman, the researcher will ask about your menstrual cycle and contraceptive use. If in the course of the screening interview the researcher feels that you have a serious condition that requires medical attention, the researcher may consult with Dr. Rabinak or provide you with an appropriate referral.

If you are still eligible for the study after the interview, Dr. Rabinak and/or Dr. Kilgore will decide whether it is medically safe for you to participate in this study in our laboratory, and the researcher will let you know the decision. If Dr. Rabinak decides that it is not safe for you to participate, a member of the research team or Dr. Rabinak will explain why and will tell you if you should see your own doctor or other health care worker.

In general, during Visit 1 you will be interviewed by a researcher, fill out some questionnaires, and complete a brief computer task. If you are a woman, you will give a urine sample a pregnancy test. If you are a woman and you are pregnant you will not be able to participate in our studies.

Visit 2: Behavioral Tests: During these visits you will be participating a virtual reality task and we will be measuring your reaction time and biological reactions as measured by changes in sweating. You will be seated in front of a computer and you may be wearing a virtual reality headset. The tasks that you will perform will show you different images. You should look carefully at all images because an animated virtual snake may follow one image most of the time, while the other images may never be followed by a virtual snake. You should try to predict whether the virtual snake will occur or not based on which image is shown. You will be asked to repeatedly rate on a scale how likely it is that you think a virtual snake will occur after each image. During the session you will also be asked to report your level of anxiety on a scale from 0 to 100.

Visit 3: Behavioral Tests with **Drug or Placebo and Magnetic Resonance Imaging (MRI) Scan: This visit will occur approximately 24 hours after Visit 2, but no more than 1 week later. You will not be allowed to take any drugs for at least 24 hours before this visit, and should not use marijuana for at least 2 weeks before. You will be required to pass a urine drug test (and pregnancy test for women) and breathalyzer test before being allowed to continue with this visit.

During Visit 2 a member of the research team will inform you whether you meet criteria to be included in the PTSD sample. **If you do meet criteria, then about 2 hours prior to the task and MRI scan **you will be asked to swallow a capsule containing either a marijuana-like drug**

(Dronabinol / Marinol) or an identical capsule containing dextrose, a form of sugar (placebo). Marinol is a Food & Drug Administration (FDA) approved drug and either dose (5mg or 10mg) you may receive is unlikely to have any effects that last beyond the duration of the study visit. A certified technician that is part of the research team will use a small needle to place an IV in a vein in your arm. This will be used to take a small sample of blood (approximately 2 table spoonful) prior to taking the pill and again at approximately 30 minute intervals after taking the pill (total of 9 blood draws). If an IV cannot be placed, blood samples may be obtained via standard venipuncture (straight needle blood collection). Blood samples will be used to measure levels of the drug in your body. About every 30 minutes after taking the pill, you will fill out some questionnaires about your mood and how you're feeling at the moment. You will also not be allowed to drive yourself home from this visit, so you should arrange a friend or family member to pick you up or a taxi can be called for you by our research staff. During Visit 2 participants in the PTSD sample will be randomized to receive the study drug or placebo, however you will not know which drug group you are randomized to until your participation in the study is over. **If you do <u>not</u> meet criteria for PTSD**, but do for the trauma-exposed group without PTSD, **you will <u>not</u> receive a drug or placebo or have your blood drawn, but** will undergo the task and MRI scan as described.

You will view the same images you did on the previous day (Visit 2), and may experience the same aversive stimulus as during Visit 2. You will again be asked to rate how much you expect to experience the aversive stimulus after each image. You will also be asked to report your level of anxiety on a scale from 0 to 100.

You will be in the MRI scanner for approximately 90 minutes during this visit. After you have finished these tasks and you received a capsule you will rest at our lab for about 2 hours to ensure that you are feeling okay before you leave. During this 2 hour period, you will again fill out some questionnaires about your mood and how you are feeling, but you will otherwise be free to pass the time as you choose. If you did not receive a capsule, you will be allowed to leave.

If you received a capsule during this visit you should not drive, operate heavy machinery, or use any drugs for at least 12 hours after this visit. This prohibition includes alcohol, aspirin, and any other drugs that are not necessary medication as well as excessive caffeine (coffee, tea, cola) and excessive nicotine (smoking). "Excessive" means substantially more than you would drink or smoke on a normal day. The use of other drugs following sessions may be hazardous to your health and safety. You should inform the researcher if you need to take any medications during your participation, or if you are participating in any other research study.

<u>Visit 4: Behavioral Tests and MRI Scan:</u> This visit will occur approximately 24 hours after Visit 3, but no more than 1 week later. We will take one small blood sample (approximately 2 table spoonful) at the beginning of the visit. You will participate in the same type of task (Visit 2) inside the MRI scanner, while we measure your reaction time, biological reactions as measured by changes in sweating, and brain activation. You will view the same images you did previously, and may experience the same aversive stimulus as during Visit 2. You will again be asked to rate how much you expect to experience the aversive stimulus after each image. You will also be asked to report your level of anxiety on a scale from 0 to 100. You will be inside the scanner for about 60 minutes during this visit.

Visit 5: Behavioral Tests and MRI Scan: This visit will occur approximately one week after Visit 3, but no more than 1 week later, and will be very similar to Visit 4. We will take one small blood sample (approximately one tablespoon) at the beginning of the visit. You will participate in the same type of task inside the MRI scanner, while we measure your reaction time and biological reactions as measured by changes in sweating, and brain activation. You will view the same images you did previously, and may experience the same aversive stimulus as during Visit 2. You will again be asked to rate how much you expect to experience the aversive stimulus after each image. You will also be asked to report your level of anxiety on a scale from 0 to 100. You will be inside the scanner for about 60 minutes during this visit. After completion of the behavioral session, you will be asked some questions regarding your participation in the study and the research staff will provide you with a description of the purpose of the drug being used, and you will be given the opportunity to ask additional questions about the study. This should take no longer than 30 minutes.

The total time that you will be involved in this study is 5 visits. Visit 1 will last approximately 2-3 hours, Visit 2 will last approximately 1 hour, Visit 3 will last approximately 5 hours for those receiving a capsule and approximately 3 hours for those not receiving a capsule, Visit 4 will last approximately 1.5 hours, and Visit 5 will last approximately 1.5 hours. Therefore, the total time we expect you will be in this study is approximately 9-12 hours. If you do not wish to continue the study you may withdraw at any time.

You participation in this study will be over after you have completed the 5 study visits, or if you decide to withdraw from the study at an earlier time. Your expected time participating in this study will be for less than one month (5 visits). Both while you are enrolled in the study and after you have completed the study, you may be contacted by the researcher(s) about your participation in the study, referring others to the study, or other research opportunities. **If you do not wish to be contacted by the research team once you have completed the study, please let the researcher know**.

Benefits

As a participant in this research study, there may be no direct benefit for you; however, information from this study may benefit other people now or in the future. In addition, this research will help identify the mechanisms for drug effect in the brain during fear processing that may better lead to the development of novel treatments for anxiety and fear problems.

You should expect no direct benefit from information from the scans in this study. The types of scans we will use are not very sensitive to many abnormalities. The scanning procedures used for this study will not be read by a specialist trained to make medical diagnoses from the scan. This means, even if there is an abnormality in your head, it is likely that it would not be discovered by the people who inspect the images. If you have any current health concerns, you should consult your doctor.

Risks

By taking part in this study, you may experience the following risks:

Physical Risks: Dronabinol is associated with some adverse experiences that occur in 1%-10% of people that take it, including: weakness, increases in heart rate, irregular heart rate, feeling flush, sensory impairment, headache, nausea, vomiting, dry mouth, changes in appetite, easy laughing, feeling on top of the world, restlessness, panic attacks, anxiety/nervousness, feeling paranoid,

confusion, dizziness, drowsiness, and lack of coordination. A doctor will be available during the tasks in order to evaluate and recommend further treatment for the occurrence of any side effects.

Subjects taking drugs daily that would interact with dronabinol will be excluded. Known medications that interact with dronabinol include: amphetamines, cocaine, other drugs that increase your heart rate; Atropine, scopolamine, antihistamines; amitriptyline, amoxapine, desipramine, other tricyclic antidepressants; barbiturates, benzodiazepines, ethanol, lithium, opioids, buspirone, antihistamines, muscle relaxants, other CNS depressants; disulfiram, fluoxetine, antipyrine, barbiturates; theophylline. Also, we will exclude subjects with a known sensitivity to the active drug or substances that make up the capsule including cannabinoid oil, sesame oil, gelatin, glycerin, and titanium dioxide.

Marinol®/dronabinol capsules are one of the psychoactive compounds present in cannabis (marijuana), and are abusable and controlled under the Controlled Substances Act. Both psychological and physiological dependence can happen in healthy individuals receiving dronabinol, but addiction is uncommon and is typically seen only after taking high doses for a long period of time. Although any exposure to dronabinol may carry some risk for development of problems of abuse, this is highly unlikely to happen after receiving only one dose.

If you experience any bad effects from the drugs, you should tell the researcher, and if they are serious the researcher may remove you from the study. You should also be aware that small amounts of the drug you may receive can remain in your body for up to four weeks after you take it and that this could result in a positive drug test. If you intend to undergo a drug screening within one month of participating in this study your drug test could test positive.

You will be exposed to magnetic fields during this study. Simple exposure to magnetic fields presents very low risk. This is considered approximately the same level of exposure as flying in an airplane on a cross-country trip. The following are potential risks related to the MRI procedure:

[1] There is a minor risk of discomfort or anxiety from being in the confined space of the MRI scanner. We will provide pads and blankets to make you as comfortable as possible. You will be able to talk to us throughout the study, and you will be able let us know right away if you want to stop the study and get out of the scanner. [2] The MRI scanner makes loud, vibrating noises. You will wear foam earplugs to reduce the loud noises made by the scanner and prevent any hearing damage. [3] Some studies, like this one, have the potential to cause "peripheral nerve stimulation" (PNS). PNS is a light touching sensation on the skin surface, lasting only for a few seconds. It may cause mild discomfort, but is not harmful to you. The MRI machine is operated within FDA guidelines so the potential for inducing PNS is low. [4] Sometimes, subjects report a temporary, slight dizziness, light-headedness or nausea during or immediately after the scanning session. If you feel dizzy or light-headed, we will have you get up slowly from the scanner. [5] Because the strong electromagnetic fields can move metal objects and cause heating, there is a risk that loose objects (jewelry, keys) outside your body could be accelerated by the magnetic field and strike you, causing you injury. There is also a risk that the magnetic fields could disturb a metal fragment in your body, interfere with an implanted device, such as a pacemaker or neurostimulator, or cause metal (including foil-backed medication patches) on or in your body to heat up, causing you harm. We keep the environment around the MRI scanner completely free of loose metal objects that could be moved by the magnetic field, and we will make sure that you have no metal on your body that could be affected

by the MRI scanner. We will also ask you questions and have you complete an MRI screening form to make sure that you have no metal inside your body that would cause you harm during the MRI scan. [6] There is the potential that a magnetic resonance image may reveal an abnormality that is already in your body, such as a cyst or tumor. Many such abnormalities are not clinically significant, but you may need or want to investigate them further. Such a finding might require additional studies, and maybe even treatment, which would not be paid for by the investigators, the sponsor, or Wayne State University.

The MRI scanning procedures are for research purposes and follow the guidelines established by the U.S. Food and Drug Administration for MRI scanning. Care will be taken to avoid all known risks associated with MRI. However, this procedure may involve risks that are currently not anticipated. You will not receive any medications to relax you as part of the scan, nor will the scan involve any X-ray or radioactive materials.

The MRI scans being done are designed to answer research questions and are not optimized for finding brain abnormalities. These scans are not a substitute for a medical MRI that a doctor would order. Therefore, our MRI scans may not show problems that would be picked up by a medical MRI scan. Also, the investigators on this project are not trained to find abnormalities on an MRI scan. However, if we believe that we have found a medical problem or something abnormal in your MRI scan, we will contact you. The decision as to whether to proceed with further examination or treatment lies solely with you and your physician.

During the skin conductance measurement there is possibility of mild skin irritation (redness) where the electrodes contact the skin. This is rare and usually temporary.

Possible side effects of obtaining blood samples are pain, bruising, bleeding, or infection at the blood draw site. Occasionally nausea, lightheadedness, or fainting may occur.

You may also experience some tiredness of your hand during some of the behavioral tasks.

The structured diagnostic interviews (and questionnaires) are time consuming and may be boring to some individuals. These are, however, necessary in order characterize the relationship between subject factors, trauma experience, and trauma-related symptomatology.

Emotional Risks: If during the study you tell us that you are having thoughts of hurting yourself or thoughts about suicide, the PI will be immediately notified and you may meet with the PI or other licensed social worker/psychologist/psychiatrist covering for the PI on the premises and an evaluation will be made. The PI may remove you from the study if you are at risk for suicide or you may be a danger to yourself. If it is determined that you are either homicidal or suicidal the police may be alerted.

The animated virtual snake during the behavioral tasks will be uncomfortable and may be distressing. You may also get bored or frustrated during the sessions. At the end of each session, you will meet with a member of the research team to answer any question you may have about the session and be sure that you are not feeling distressed.

The diagnostic interviews and questionnaires may contain questions that concern behaviors and thoughts that may be embarrassing or sensitive in nature. If any question makes you too uncomfortable to answer, you are free to not answer it.

Social Risks: Questions about alcohol/drug use, interpersonal relationships, abuse/trauma history, and questions related to history of suicidal and/or homicidal behavior may be considered sensitive by some participants. The collection of such data poses a potential risk of loss of confidentiality around sensitive information such as psychiatric status, history of substance abuse, etc. The screening forms are stored in locked filing cabinets, and computer files are accessible only by laboratory staff. Only the research staff will have access to this information. You will not be identified in any way in any published studies reporting data obtained from the screening procedure. Interviews will be conducted by trained staff to conduct assessments who will maintain confidentiality and all data from interviews and questionnaires will be numbered so as to conceal the identity of the participant. Interviews will be conducted by experienced mental health workers who will maintain confidentiality and all data from the interviews and questionnaires will not include your name or identifying information about you.

All data from participants are marked with a research identifier number only and stored on firewall-protected servers in PI Rabinak's laboratory located in the EACPHS building. No data will have participant names on them, except for consent forms, which are stored separately in a locked file cabinet. Any paper records are kept in locked file drawers in a locked room, to which only authorized research personnel have access. Confidentiality of participant records is assured by assigning each participant with a research identifier number/code, and such data, as well as behavioral data, are stored in computer files (except for a single tracking file) without reference to name or any other type of personally-identifiable information (e.g., birth date, social security number, etc.)
There is a potential risk of breach of confidentiality if you are hospitalized.

Participation in this study involves unknown risks to women who are or may become pregnant, to unborn babies, and to nursing infants. Therefore, to minimize the risks and to take part in this study, medically acceptable forms of birth control are required by (a) women during the study for at least 1 month after the study drug has been stopped and (b) men during the study and for at least 3 months after the study drug has been stopped. Men must wait longer to account for the time needed for sperm to fully mature compared to eggs in women.

Medically acceptable birth control may include the following methods: barrier protection—such as condoms used with contraceptive jelly, intrauterine devices (IUD), and abstinence (not having sex). Oral contraceptives may be used, but should not be the only means of protection. The use of medically acceptable birth control may not be necessary if the female partner has had permanent hysterectomy (sterilization) with some form of tubal occlusion, or if the male partner has had a vasectomy (so long as the female partner does not get a new partner). No birth control method completely eliminates the risk of pregnancy.

In addition to the pregnancy testing done prior to the start of the study (Visit 1), additional testing will be done at the beginning of Visit 3 prior to administration of the drug and MRI scanning.

You should inform the study doctor (PI) immediately if you or your partner intends to get pregnant, or if you or your partner should become pregnant while participating in this research study, so that your choices and options can be explored and discussed.

Being in more than one research study at the same time, or even at different times, may increase the risks to you. It may also affect the results of the studies. You should not take part in more than one study without approval from the researchers involved in each study.

There may also be risks involved from taking part in this study that are not known to researchers at this time.

Alternatives

The alternative to taking part in this study is to not participate in the study. Participation is totally voluntary, and there is no penalty for not participating.

Study Costs

Participation in this study will be of no cost to you. The study team has given you instructions about this research study. It is important you follow these instructions carefully. You or your health plan must pay for any treatment that is part of your usual medical care or that is related to a medical condition you had before participating in the study. Examples include:

- Health care given during the study as part of your regular care
- Items or services needed to give you study drugs or devices
- Monitoring for side effects or other problems
- Deductibles or co-pays for these items or services

Compensation

For taking part in this research study, you will be paid for your time and inconvenience. If you participate in the screening today but do not qualify for the study, you will be paid up to $60 for attending. If you qualify for the study and successfully complete all study visits (Visits 1-5), you will be paid up to $140 if you are not given a capsule or up to $260 if you are given a capsule. If you withdraw prior to completing the study, you will receive partial payment, based on the total number of sessions you completed (see breakdown below). If you miss a session or are late for sessions, you may be dropped from the study without any further financial compensation. Payment for study sessions will disbursed in cash at the conclusion of the study.

Payment summary up to the following amount:

- Participants in the PTSD group that receive a capsule: $30* or $60 (visit 1) + $20 (visit 2) + $100 (visit 3) + $40 (visit 4) + $40 (visit 5) = $230-$260
- Participants in the trauma-exposed non-PTSD group that do not receive a capsule: $30* or $60 (visit 1) + $20 (visit 2) + $20 (visit 3) + $20 (visit 4) + $20 (visit 5) = $110 to $140

*You will receive $30 for Visit 1 if we are able to use data collected from screening questionnaires that you completed as part of a prior study within the last month.

Research Involving the Future Use of Biological Specimens

Your blood samples may be used for future use, however the planned future use is unknown at this time. Your blood sample will be stored in Dr. Kyle Burghardt's lab at the Wayne State University Eugene Applebaum College of Pharmacy and Health Sciences with a code number by the study. Your name or other information that could identify you will not appear on the blood samples or results. Only certain study investigators who are NOT working directly with the blood samples will have the master code that links your name with the code number. This master code will be kept on a secure server behind two different passwords.

You have the right to withdraw your consent at any time by notifying the PI listed on the front of this informed consent in writing, at which time your blood sample will be destroyed.

You have the right to obtain future access to the stored samples for information that may be of clinical relevance to you by contacting the PI listed on the front of this informed consent in writing.

Researchers who plan to use your sample for future scientific study will have to request and receive all of the necessary approvals from Dr. Rabinak and the Wayne State University Human Investigation Committee before using your samples. Samples will only be released to scientists who are qualified and prepared to conduct a research study. Prior to any future use beyond the scope of this study, your blood samples will either be completely anonymized (the link between the code on the sample and your identifying information will be destroyed), or you will be contacted to consent to having your coded samples used for future study.

Research Related Injuries

In the event that this research related activity results in an injury, treatment will be made available including first aid, emergency treatment, and follow-up care as needed. Cost for such care will be billed in the ordinary manner to you or your insurance company. No reimbursement, compensation, or free medical care is offered by Wayne State University. If you think that you have suffered a research related injury, contact the PI right away at (313) 577-9875.

Confidentiality

All information collected about you during the course of this study will be kept confidential to the extent permitted by law. You will be identified in the research records by a code name or number. Information that identifies you personally will not be released without your written permission. However, the study sponsor, the Institutional Review Board (IRB) at Wayne State University, or federal agencies with appropriate regulatory oversight [e.g., Food and Drug Administration (FDA), Office for Human Research Protections (OHRP), Office of Civil Rights (OCR), etc.) may review your records.

When the results of this research are published or discussed in conferences, no information will be included that would reveal your identity.

A description of this clinical trial will be available on http://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.

Confidentiality is limited, however, when there is either a danger to self or others. The following information must be released/reported to the appropriate authorities if at any time during the study there is concern that:

- child abuse or elder abuse has possibly occurred
- you have a reportable communicable disease (i.e., certain sexually transmitted diseases or HIV)
- criminal activities has possibly occurred
- you are discovered to be acutely homicidal or suicidal during the evaluation period the police will be alerted.

Voluntary Participation/Withdrawal

Taking part in this study is voluntary. You have the right to choose not to take part in this study. If you decide to take part in the study you can later change your mind and withdraw from the study.] You are free to only answer questions that you want to answer. You are free to withdraw from participation in this study at any time. Your decisions will not change any present or future relationship with Wayne State University or its affiliates, or other services you are entitled to receive.

The PI may stop your participation in this study without your consent. If you have any side effects that are very serious or if you become ill during the course of the research study you may have to drop out, even if you would like to continue. The PI will make the decision and let you know if it is not possible for you to continue. The decision that is made is to protect your health and safety, or because it is part of the research plan that people who develop certain conditions or do not follow the instructions from the study doctor may not continue to participate.

While taking part in this study you will be told of any important new findings that may change your willingness to continue to take part in the research.

Questions

If you have any questions about this study now or in the future, you may contact Dr. Rabinak or one of her research team members at the following phone number (313) 577-9875 or (313) 577-5404, respectively. If you have questions or concerns about your rights as a research participant, the Chair of the Institutional Review Board can be contacted at (313) 577-1628. If you are unable to contact the research staff, or if you want to talk to someone other than the research staff, you may also call the Wayne State Research Subject Advocate at (313) 577-1628 to discuss problems, obtain information, or offer input.

Consent to Participate in a Research Study

To voluntarily agree to take part in this study, you must sign on the line below. If you choose to take part in this study you may withdraw at any time. You are not giving up any of your legal rights by signing this form. Your signature below indicates that you have read, or had read to you, this entire consent form, including the risks and benefits, and have had all of your questions answered. You will be given a copy of this consent form.

Signature of participant	Date
Printed name of participant	Time
Signature of person obtaining consent	Date
Printed name of person obtaining consent	Time

Continue to HIPAA Authorization on next page.

HIPAA Authorization

A federal regulation, known as the "Health Insurance Portability and Accountability Act (HIPAA)" gives you certain rights concerning the use and disclosure (sharing with others) of your Protected Health Information (PHI). This regulation provides safeguards for the privacy and security of your information. Your permission (authorization) is required for the use and sharing of any protected health information collected as part of this research study. If you are not willing to sign this authorization to use and/or disclose your PHI by the research team, you will not be eligible to take part in this research study.

The principal investigator (PI) and her research team will use your medical records and information created or collected as part of this research study. Your PHI is important for the PI and her research team in order to collect information about you during the study, to be able to contact you if needed, and to provide treatments to you during the study, if required. The PI may send out your study related health information to the sponsor or other entities involved in this study.

Your medical records, which may contain information that directly identifies you, may be reviewed by representatives from groups identified below. The purpose of these reviews is to assure the study is being conducted properly, that data is being obtained correctly or for other uses authorized by law. These reviews occur at the study site or in the PI's research office and can take place anytime during the study or after the study has ended.

The PHI that will be "USED" for this research includes the following: name (or initials), e-mail address, elements of dates, telephone numbers, and any unique identifying numbers or characteristics or code.

The PHI that will be "DISCLOSED" or shared with others for this research includes the following: name (or initials), e-mail address, elements of dates, telephone numbers, and any unique identifying numbers or characteristics or code.

Your study information may be **used** or **shared** with the following people or groups:

- The PI, co-investigators, and key personnel of WSU associated with the research project
- WSU's Institutional Review Boards (IRB)
- Authorized members of WSU's workforce who may need to access your information in the performance of their duties.
- The study Sponsor or representative, including companies it hires to provide study related services, which include: National Institutes of Health.
- Federal agencies with appropriate regulatory oversight (e.g., FDA, OHRP, OCR, etc.) may review your records.

Once your information has been released according to this Authorization, it could be released again and may no longer be protected by the HIPAA regulations.

This Authorization does not expire. The research team may need to correct it or provide missing information about you even after the study has ended, and your medical records may be needed to assist in this process.

- During your participation in this research project you will not be able to access that part of your medical record involved in the research. This will be done to prevent the knowledge of the research results from affecting the reliability of the project. Your information will be available to the treating physician should an emergency arise that would require for him/her to know this information to best treat you. You will have access to your medical record when the study is ended or earlier, if possible. The PI is not required to release research information that is not part of your medical record.

You may withdraw (take back) your permission for the **use** and **disclosure** of your PHI for this research at any time, by **writing** to the PI at the address on the first page of this form. Even if you withdraw your permission, the PI for the research project may still use your PHI that was collected prior to your written request if that information is necessary to the study. If you withdraw your permission for use of your PHI, you will also be withdrawn from the research project. Withdrawing your authorization **will not** affect the health care that will be provided by the Detroit Medical Center and/or the WSU School of Medicine Practice Plans.

Authorization to use and disclose PHI

- By signing this document, you are authorizing the PI to **use** and **disclose** PHI collected about you for the research purposes as described above.

Signature of participant _____ Date _____

Printed name of participant _____

Signature of person obtaining Authorization _____ Date _____

Printed name of person obtaining Authorization _____

APPROVED

OCT 03 2019

WAYNE STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD

Continue to Consent for Genetic Testing on next page.

Consent for Genetic Testing

PROCEDURE FOR GENETIC/DNA SAMPLE: You will be asked to allow genetic testing on a biological specimen (a cheek swab) that will be collected and stored as part of the study on Visit 1. Trained study staff will swab the inside of your cheeks with a soft bristle brush so that we can collect your DNA, which is the part of the cheek swab sample or collection of cells that holds genetic information. Your DNA sample will be stored at a central laboratory located the Wayne State University Eugene Applebaum College of Pharmacy and Health Sciences under a code number. All results of genetic testing will be stored under a code number without personal identifiers in a secure, password-protected database. The researchers who view this database will not have access to your name or identifying information. You will not be informed of any of the results of the genetic testing on your DNA. The results will not be placed in your medical record. A cheek swab sample will be used to prepare DNA and can be stored separately for future genetic analyses. The DNA extracted from the sample will be used to study potential causes and effects of PTSD. The DNA samples will be kept for up to 50 years in the lab at Wayne State University.

Risks
The kind of genetic information being analyzed in this study is not likely to have any direct effect on your health. It is possible, but very unlikely, that your genetic information could be misused if people other than the researchers obtained it. The chance of this ever happening to you is very small.

Breach of confidentiality is possible, however unlikely as the results of the DNA testing will be kept private. DNA will be stored at a central lab under the direction of Dr. Burghardt located the Wayne State University Eugene Applebaum College of Pharmacy and Health Sciences with a code number by the study. Your name or other information that could identify you will not appear on the DNA samples or results. Only certain study investigators who are working directly with the genetic samples will have the master code that links your name with the code number. This master code will be kept on a secure server behind two different passwords.

Benefits
You may not receive any direct benefits from being in this study. However, information from this study may benefit other people and the treatment of PTSD now or in the future.

Alternatives
Your alternative is not to participate in this genetic testing.

Voluntary Participation/Withdrawal
Your participation in the genetic testing part of this research study is voluntary. You may choose not to participate in this part of the study even if you decide to participate in the fear and learning study previously discussed in this consent form. If you do decide to participate in this genetic testing, but later change your mind, you must notify the PI listed on the front of this informed consent in writing.

Genetic Information Nondiscrimination Act (GINA):
A new 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 will protect you in the following ways:

- Health insurance companies and group health plans may not request your genetic information that we get from this research
- Health insurance companies and 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 by May 21, 2010. All employers with 15 or more employees must follow this law as of November 21, 2009.

Be aware that this new Federal law does not protect you against genetic discrimination by companies that sell life insurance, disability insurance, or long-term care insurance.

Research Involving the Future Use of Biological Specimens

Your genetic sample may be used for future use, however the planned future use is unknown. Your genetic sample will be stored at a central lab under the direction of Dr. Burghardt located the Wayne State University Eugene Applebaum College of Pharmacy and Health Sciences with a code number by the study. Your name or other information that could identify you will not appear on the DNA samples or results. Only certain study investigators who are working directly with the genetic samples will have the master code that links your name with the code number. This master code will be kept on a secure server behind two different passwords.

You have the right to withdraw your consent at any time by notifying the PI listed on the front of this informed consent in writing, at which time your tissue sample will be destroyed.

You have the right to obtain future access to the stored samples for information that may be of clinical relevance to you by contacting the PI listed on the front of this informed consent in writing.

Researchers who plan to use your sample for future scientific study will have to request and receive all of the necessary approvals from Dr. Rabinak and the Wayne State University Human Investigation Committee before using your sample. Samples will only be released to scientists who are qualified and prepared to conduct a research study.

CONSENT FOR GENETIC TESTING

Instructions: Please **CIRCLE "YES"** or **"NO"** and write your initials and today's date where indicated in the following question:

			Initials	Date
I will provide biological specimens to test my DNA for genes related to the main goals of this study: to better understand potential treatments for people with PTSD.	YES	NO	_____	_____