

Official Title: An Evaluation of Insomnia Treatment to Reduce Cardiovascular Risk
in Patients With Posttraumatic Stress Disorder

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Consent to Participate in a Research Study
An Evaluation of Insomnia Treatment to Reduce
Cardiovascular Risk in Patients with Posttraumatic Stress Disorder

CONCISE SUMMARY

The purpose of this study is to understand the contribution of insomnia to cardiovascular disease risk among those with posttraumatic stress disorder (PTSD). Participation in the study lasts six months. If you participate in the study, we will use a process like flipping a coin to assign you to one of two groups. If you are assigned to the first group, you will receive eight sessions of a treatment for insomnia. You have a two in one chance of being assigned to the first group. If you are assigned to the second group, the study coordinator will call you each week for eight weeks to ask you questions about your sleep. If you have symptoms of sleep apnea, we will send you home with a device to wear as you sleep. This device will evaluate for the presence of sleep apnea. You will wear a wrist monitor to evaluate sleep on three separate occasions for one week, and complete an online survey each day to answer some questions about your sleep during that week. We will ask you to collect your urine for 24 hours at three different time points. You will participate in three separate lab visits in which we will do a fasting blood draw, a blood pressure evaluation procedure, and an ultrasound image (picture) of the arteries in your arm. There is a risk of discomfort or distress in answering questions. With the blood draw, there is a risk of bruising at the site of the draw and rarely, fainting and/or infection. The blood pressure evaluations may cause tingling and discomfort in the arm. One potential benefit of participation is that you may experience improved sleep quality related to the insomnia treatment.

You are being asked to take part in this research study because you may have posttraumatic stress disorder (PTSD) and insomnia. Research studies are voluntary and include only people who choose to take part. Please read this consent form carefully and take your time making your decision. As your study doctor or study staff discusses this consent form with you, please ask him/her to explain any words or information that you do not clearly understand. We encourage you to talk with your family and friends before you decide to take part in this research study. The nature of the study, risks, inconveniences, discomforts, and other important information about the study are listed below.

Please tell the study doctor or study staff if you are taking part in another research study.

A grant from the National Institutes of Health (NIH) will sponsor this study. Portions of Dr. Beckham and Dr. Sherwood's and their research team's salaries will be paid by this grant.

WHO WILL BE MY DOCTOR ON THIS STUDY?

If you decide to participate, Dr. Beckham will be your doctor for the study and will be in contact with your regular health care provider throughout the time that you are in the study and afterwards, if needed.

WHY IS THIS STUDY BEING DONE?

The purpose of this study is to understand the contribution of insomnia to cardiovascular disease risk among those with PTSD.



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HOW MANY PEOPLE WILL TAKE PART IN THIS STUDY?

Approximately 500 people will take part in this study at Duke.

WHAT IS INVOLVED IN THE STUDY?

If you agree to be in this study, you will be asked to sign and date this consent form. You will have the following tests and procedures to make sure that you are eligible:

- Three interviews about sleep, PTSD, and other psychological symptoms
- (if you are of childbearing potential) Urine pregnancy test
- Questionnaires about your sleep, mood, medical history, and history of trauma.

These procedures will be completed over two visits. At the end of the first screening visit, if you have symptoms of sleep apnea, we will send you home with a portable sleep apnea screening device that you will use for one night. The purpose of this assessment is to determine if you have sleep apnea. Sleep apnea is a condition in which a person has interrupted breathing while sleeping. The device has a wrist strap, a finger cover, and a patch that you wear on your chest. You will be asked to upload an app to your personal phone so that the device can load data to your phone so it can be transferred to the study team. If you do not wish to use your personal phone, we will loan you a Duke-owned phone for this portion of the study. You will be asked to return the study phone in person or by mail, if that is easier. You will not be paid for completing the apnea assessment if we do not get the phone back from you. If it is determined that you may have sleep apnea, you will not be eligible to participate in this study. If you do not have sleep apnea, you will complete the second screening visit.

If you are eligible to participate, we will loan you a wristband monitor to wear for one week and one day. This device, called an Actiwatch, includes a light sensor and a movement sensor. The Actiwatch is used to allow us to better understand your sleep habits. During this period, we will ask you to complete a brief diary each morning about your sleep the night before. If you do not complete the diary within 6 hours of rising on at least 5 of the 7 days, you will be excluded from the study.

We will also send you a small cooler bag and a set of bottles. You will be asked to keep all of your urine for 24 hours in these bottles and cooler. This will need to be done on two to three separate occasions as described below. Each time, you will return the urine to your study coordinator at your next visit. We will use the urine samples to run laboratory tests related to the study.

You will be asked to repeat these same procedures twice more during the study.

After you have completed the week-long sleep assessment, you will return to the laboratory for a baseline assessment. If you cancel or no-show to this baseline assessment two times, you will be excluded from the study. We will ask you to fast overnight prior to the session and to not drink any alcohol the evening and night before this appointment. You will have blood drawn by a trained technician (using about 4 teaspoons of blood drawn from a vein by needle-stick) in order to test your fasting levels of lipids and glucose. After that, we will measure the function of your blood vessels by taking an ultrasound image (picture) of the artery in your arm while you lie quietly for about ten



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minutes. We will also take pictures after a cuff has been inflated on your arm for five minutes. After completing the blood draw and the pictures of the arteries in your arm, you will be allowed a breakfast break if you would like. You will be asked to repeat these same procedures twice more during the study.

We will measure your height and weight to determine body mass index. We will take your blood pressure. If your blood pressure is too high, you will be unable to participate in the study right now. If at a later time your blood pressure is controlled, you may be able to enroll in the study again.

We will set you up with a blood pressure monitor that will monitor your blood pressure for 24 hours. You will wear the blood pressure cuff for the whole 24-hour period, and your blood pressure will be taken many times over that period. While you are wearing the cuff, you will also wear the Actiwatch we loaned you. After 24 hours, you can remove the blood pressure cuff and the Actiwatch. You will FedEx the equipment back to us with a mailer we provide. You will be asked to repeat these same procedures twice more during the study.

During this laboratory visit, we will assign you to one of two groups by using a process like flipping a coin. If you're assigned to the first group, you will receive eight weekly sessions of treatment for insomnia. You have a two in one chance of being assigned to this group. The treatment is called cognitive-behavioral treatment for insomnia (CBT-I). Treatment sessions will occur in person or via WebEx, Zoom, phone, or another online platform. Your counseling sessions will be audio-recorded so that a trained therapist can review them to make sure the therapy is being done correctly. You will be asked to complete an online sleep diary each day as part of your treatment. If you're assigned to the second group, the study coordinator will contact you once per week, for eight weeks, by WebEx or Zoom to discuss your sleep and your PTSD symptoms. We will audio-record these calls so that we can make sure that they are being done correctly. You will be asked to complete questionnaires about your sleep and your mood.

After you have completed the eight weeks of counseling for insomnia, or weekly phone calls about your sleep, we will ask you to repeat several of the procedures described above. These include:

1. wearing the blood pressure monitor for 24 hours;
2. wearing the Actiwatch for one week;
3. completing the online survey to report on your sleep for one week;
4. completing questionnaires;
5. fasting blood draw; and
6. an ultrasound of your arm.

You will be asked to return the study equipment after this monitoring period.

You will be asked to repeat these procedures at a follow-up visit. This visit will occur about six months after your first lab assessment or three months after your end-of-treatment assessment, whichever is later. You will be asked to return the study equipment. If you were assigned to the group that received insomnia treatment, your study involvement will be complete. If you were assigned to the group that receives weekly phone calls, you will be offered a chance to participate in the insomnia treatment. If you



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decline, your study involvement will be complete. If you accept, after eight treatment sessions, your study involvement will be complete.

While you're in the study, you may find that you'd like to refer another person to participate. In order to encourage you to refer other people to the study, we'll give you three referral coupons that are marked with an identification number that is unique to you. You can give these referral coupons to any person you think might be interested in the study. If that person comes in for a screening visit and brings us his/her coupon, we'll offer you a \$20 payment for taking the time to make the referral. Please note that we won't be able to tell you whether or not a specific person uses your coupon. We ask that you not discuss with others whether you think/believe a person you have referred may be participating in the study. You can choose not to distribute the coupons we give you, and you can refuse to even receive the coupons.

Members of the study team will communicate with you by phone, email, standard mail, and/or text messages that are sent from a Duke phone. Text messages will include appointment reminders. Please let the study coordinators know how you prefer to be contacted. If you do not wish to receive emails or text messages, please let the study coordinator know. Please note, texting is only available for your use during normal business hours. The phone is not monitored outside of business hours. If you have an urgent need to reach the study team, please see the instructions in the section called "WHOM DO I CALL IF I HAVE QUESTIONS OR PROBLEMS?" in this consent form.

If for any reason you are unable to complete study procedures, the study team may withdraw you from the study.

HOW LONG WILL I BE IN THIS STUDY?

If you enroll in the study, you will be actively involved in regular visits for about 12 weeks. You have a follow-up visit about six months later. You will be involved in the study for a total of about nine months.

You can choose to stop participating at any time without penalty or loss of any benefits to which you are entitled. However, if you decide to stop participating in the study, we encourage you to talk to your doctor first.

Clinically relevant results of this research will be communicated with you if you have any concerning lab results or blood pressure readings. A study team member may provide you with documentation of these results so that you can share them with your regular doctor.

WHAT ARE THE RISKS OF THE STUDY?

There is a risk of discomfort or distress in answering questions in the interview and/or questionnaires, especially questions related to traumatic experiences. However, distress and discomfort related to these tasks are usually temporary and well-tolerated. You may refuse to answer any of the questions and you may take a break at any time during the study.



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Risks associated with drawing blood from your arm include momentary discomfort and/or bruising. Infection, excess bleeding, clotting, or fainting are also possible, although unlikely. There is a minimal risk of disrupted sleep associated with the sleep apnea assessment. With the 24-hour blood pressure monitoring, there is a risk of tingling and discomfort in the arm. The blood pressure cuff has built in safe-guards to avoid over-inflation or prolonged inflation. The ultrasound of your arm will also include blood pressure cuff inflation for 5 minutes, which has the risk of causing tingling and discomfort in the arm. There are no known risks associated with use of the actigraphy or the online sleep diary. There is the potential risk of loss of confidentiality. Every effort will be made to keep your information confidential; however, this cannot be guaranteed. You may stop your participation in this study at any time.

If you need to be evaluated for sleep apnea and choose to install the mobile application (app) on your personal phone, there are risks involved. Information collected by mobile applications or "apps" is subject to their terms of use, which you should read carefully. Many apps make claims that they are very secure, compliant with federal privacy regulations, and used and tested by other academic centers. However, any mobile app that is downloaded carries potential security risks, and Duke cannot guarantee that these mobile apps are free of risk.

It is recommended that you run a current operating system (OS) on your device, review the privacy/security settings often, and restrict any unnecessary access. These applications may run in the background of your device. Mobile apps may have unanticipated impact on the operations of your device (e.g., battery drainage). If you do not have an unlimited data/text plan, you may incur additional charges. At the conclusion of the study, we will provide you instructions on how to remove the mobile apps from your device.

As with all technology, we ask you to wait until you are in a safe environment, use good judgment and follow prevailing laws. Do not perform study-related activities while you are driving.

If you are loaned a Duke phone for use during this study and you use it for non-study related reasons, this could add your personal information onto the device and potentially result in it being sent to unauthorized persons. The device will be preset with security settings. Please do not alter these during the course of the study. When you return the device at the end of the study, the device will be cleaned to remove any of your personal information. If the device is lost or stolen during the course of the study, please contact the study team immediately.

There may be risks or discomforts that are not yet known.

ARE THERE BENEFITS TO TAKING PART IN THE STUDY?

If you agree to take part in this study, there may be direct medical benefit to you. You may benefit from improved sleep related to receiving treatment for insomnia but this cannot be guaranteed. We hope that in the future the information learned from this study will benefit other people with your condition.



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WHAT ALTERNATIVES ARE THERE TO PARTICIPATION IN THIS STUDY?

Instead of being in this study, you could choose to have insomnia treatment elsewhere. If you prefer this, the study team will provide a referral if available.

WILL MY INFORMATION BE KEPT CONFIDENTIAL?

Participation in research involves some loss of privacy. We will do our best to make sure that information about you is kept confidential, but we cannot guarantee total confidentiality. Your personal information may be viewed by individuals involved in this research and may be seen by people including those collaborating, funding, and regulating the study. We will share only the minimum necessary information in order to conduct the research. Your personal information may also be given out if required by law.

We will use a Duke-owned, password-protected and encrypted device to make audio recordings of your insomnia treatment sessions. These audio recordings will be transferred to a secure Duke computer server using a direct connection.. After they are reviewed by a second staff member, the recordings will be moved to an encrypted hard drive to which only study staff have the password. The recordings will be stored until the end of the study period. Every effort will be made to protect your confidential information but this cannot be guaranteed.

As part of the study, your data may be shared with a psychologist at University of North Carolina at Chapel Hill. This psychologist will be analyzing some of the study data. None of the data shared with this collaborator will include identifying information about you.

As part of the study, results of your study-related laboratory tests, x-rays, and procedures may be reported to the National Institutes of Health and its affiliates. In addition, your records may be reviewed in order to meet federal or state regulations. Reviewers may include the National Institutes of Health the Duke University Health System Institutional Review Board, and others as appropriate. If any of these groups review your research record, they may also need to review your entire medical record.

The Department of Health and Human Services (HHS) has issued a Certificate of Confidentiality to further protect your privacy. With this Certificate, the investigators may not disclose research information that may identify you in any Federal, State, or local civil, criminal, administrative, legislative, or other proceedings, unless you have consented for this use. Research information protected by this Certificate cannot be disclosed to anyone else who is not connected with the research unless:

- 1) there is a law that requires disclosure (such as to report child abuse or communicable diseases but not for legal proceedings);
- 2) you have consented to the disclosure, including for your medical treatment; or
- 3) the research information is used for other scientific research, as allowed by federal regulations protecting research subjects.



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Disclosure is required, however, for audit or program evaluation requested by the agency that is funding this project or for information that is required by the Food and Drug Administration (FDA).

You should understand that a Confidentiality Certificate does not prevent you or a member of your family from voluntarily releasing information about yourself or your involvement in this research. If you want your research information released to an insurer, medical care provider, or any other person not connected with the research, you must provide consent to allow the researchers to release it. This means that you and your family must also actively protect your own privacy.

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

All of the blood, urine and laboratory studies are being done only because you are in this study. The study results will not be provided to you OR sent to your physician, unless you have some laboratory values or blood pressure readings that are concerning to the study team. If that is the case, this information will be shared directly with you.

The study results will be retained in your research record for at least six years after the study is completed. At that time either the research information not already in your medical record may be destroyed or information identifying you will be removed from such study results at DUHS. Any research information in your medical record will be kept indefinitely.

This information may be further disclosed by the sponsor of this study. If disclosed by the sponsor, the information is no longer covered by federal privacy regulations. If this information is disclosed to outside reviewers for audit purposes, it may be further disclosed by them and may not be covered by federal privacy regulations.

While the information and data resulting from this study may be presented at scientific meetings or published in a scientific journal, your name or other personal information will not be revealed.

Some people or groups who receive your health information might not have to follow the same privacy rules. Once your information is shared outside of DUHS, we cannot guarantee that it will remain private. If you decide to share private information with anyone not involved in the study, the federal law designed to protect your health information privacy may no longer apply to the information you have shared. Other laws may or may not protect sharing of private health information.

WHAT ARE THE COSTS TO YOU?

You or your insurance provider will be responsible and billed for all costs related to your routine medical care, including copayments and deductibles. Routine medical care services are those that you would have received for your condition if you were not participating in this research study. Not all services are covered by insurance. Some procedures or scans may require pre-authorization by your insurance plan. We will notify you if we learn that a service is not covered by your insurance plan as part of the pre-authorization process. If it is not covered, you will be responsible for paying for it. The



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amount of your out-of-pocket expense will depend on your insurance plan. For beneficiaries with Medicare Advantage Plans, traditional Medicare is billed for the routine cost of a research study. You may have more or higher co-pays than with a Medicare Advantage Plan. Please discuss the costs of the study with Dr. Beckham or Dr. Sherwood. At your request, a Financial Counselor in the clinic may provide you with an estimate of costs for routine services.

There are no additional costs to you for participating in the study.

WHAT ABOUT COMPENSATION?

You will be reimbursed up to \$1060 for your expenses related to your participation (parking, gas, and time). The following table indicates how much you are paid for each portion of the study. If you are loaned a Duke phone to use in this study, you must return the phone in order to be paid for the sleep apnea assessment.

Table 1. Participant Reimbursement	
Task Completed	Payment
Screening Visit	Up to \$75
Sleep Apnea Screen and Actigraphy Monitoring	\$100
Baseline Labs (FMD, ABP)	\$225
Treatment Sessions (8)	\$0
Posttreatment Actigraphy Monitoring (1 week)	\$50
Posttreatment Labs (FMD, ABP)	\$250
Follow-up Actigraphy Monitoring (1 week)	\$50
Follow-up Labs (FMD, ABP)	\$250
Seed Recruitment	Up to \$60
TOTAL	\$1060

If you are eligible to participate in the study and begin treatment, you will not be paid for participation until you complete the posttreatment monitoring and labs. At that time, you will be paid \$700. If at any time you are excluded, withdraw, or are withdrawn from the study, you will be paid for the portions of the study that you have completed.

Payment received as compensation for participation in research is considered taxable income to the research subject. If payment to any individual exceeds \$600 in any one calendar year, Duke University is required to report this information to the Internal Revenue Service (IRS). Research subject payments to a non-employee of Duke University exceeding \$600 during any calendar year will result in a 1099 (Miscellaneous Income) form being issued to the individual and a copy sent to the IRS.

WHAT ABOUT RESEARCH RELATED INJURIES?

Immediate necessary medical care is available at Duke University Medical Center in the event that you are injured as a result of your participation in this research study. However, there is no commitment by Duke University, Duke University Health System, Inc., or your Duke physicians to provide monetary compensation or free medical care to you in the event of a study-related injury.

For questions about the study or research-related injury, contact Dr. Beckham at 919-286-0411, ext. 7973 during regular business hours and at 919-286-0411 and ask the operator to contact Dr. Beckham at home after hours and on weekends and holidays.



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WHAT ABOUT MY RIGHTS TO DECLINE PARTICIPATION OR WITHDRAW FROM THE STUDY?

You may choose not to be in the study, or, if you agree to be in the study, you may withdraw from the study at any time. If you withdraw from the study, no new data about you will be collected for study purposes unless the data concern an adverse event (a bad effect) related to the study. If such an adverse event occurs, we may need to review your entire medical record. All data that have already been collected for study purposes, and any new information about an adverse event related to the study, will be sent to the study sponsor.

Your decision not to participate or to withdraw from the study will not involve any penalty or loss of benefits to which you are entitled, and will not affect your access to health care at Duke. If you withdraw from the research, we will ask you to return any study equipment that you may have. If you do decide to withdraw, we ask that you contact Dr. Beckham in writing and let her know that you are withdrawing from the study. Her mailing address is Jean Beckham, Ph.D., Duke University Medical Center, Box 2969, Durham, NC 27705.

We will tell you about new information that may affect your health, welfare, or willingness to stay in this study.

Your doctor may decide to take you off this study if your condition gets worse, if you have serious side effects, or if your study doctor determines that it is no longer in your best interest to continue. The sponsor or regulatory agencies may stop this study at any time without your consent. Reasons why this might occur include that you are unable to complete the study procedures. If this occurs, you will be notified and your study doctor will discuss other options with you.

Your lab samples and/or data may be stored and shared for future research without additional informed consent if identifiable private information, such as your name and medical record number, are removed. If your identifying information is removed from your samples or data, we will no longer be able to identify and destroy them.

The use of your samples may result in commercial profit. You will not be compensated for the use of your samples other than what is described in this consent form.

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

WHOM DO I CALL IF I HAVE QUESTIONS OR PROBLEMS?

For questions about the study or a research-related injury, or if you have problems, concerns, questions or suggestions about the research, contact Dr. Beckham at (919) 286-0411 extension 7973 during the day, and at (919) 286-0411 (and ask the operator to call Dr. Beckham at home) after hours and on weekends and holidays.



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For questions about your rights as a research participant, or to discuss problems, concerns or suggestions related to the research, or to obtain information or offer input about the research, contact the Duke University Health System Institutional Review Board (IRB) Office at (919) 668-5111.

STATEMENT OF CONSENT

"The purpose of this study, procedures to be followed, risks and benefits have been explained to me. I have been allowed to ask questions, and my questions have been answered to my satisfaction. I have been told whom to contact if I have questions, to discuss problems, concerns, or suggestions related to the research, or to obtain information or offer input about the research. I have read this consent form and agree to be in this study, with the understanding that I may withdraw at any time. I have been told that I will be given a signed and dated copy of this consent form."

Signature of Subject

Date

Time

Signature of Person Obtaining Consent

Date

Time