UF | Institutional Review Board
UNIVERSITY of FLORIDA

INFORMED CONSENT FORM
to Participate in Research, and

AUTHORIZATION
to Collect, Use, and Disclose Protected Health Information (PHI)

INTRODUCTION

Name of person seeking your consent:_____

Place of employment & position: _____

Please read this form, which describes the study in some detail. A member of the research team will describe this study to you and answer all of your questions. Your participation is entirely voluntary. If you choose to participate you can change your mind at any time and withdraw from the study. You will not be penalized in any way or lose any benefits to which you would otherwise be entitled if you choose not to participate in this study or to withdraw. If you have questions about your rights as a research subject, please call the University of Florida Institutional Review Board (IRB) office at (352) 273-9600.

GENERAL INFORMATION ABOUT THIS STUDY

1. Name of Participant ("Study Subject")

_____

2. What is the Title of this research study?

Treatment of mild cognitive impairment with transcutaneous vagal nerve stimulation

3. Who do you call if you have questions about this research study?

Principal Investigator: John B. Williamson, PhD, 352-548-6920

Other research staff: Damon G. Lamb, PhD, 352-548-6924

Research Coordinator: Brianna Akers, 352-294-4952

4. Who is paying for this research study?

The sponsors of this study are the National Institute on Aging and the University of Florida.

5. In general, what do you need to know about this Research Study?

Agreeing to become involved in any research is always voluntary. By signing this form, you are not waiving any of your legal rights. If you decide not to participate in this research, you will not be penalized in any way and you will not lose any benefits to which you are entitled. If you have questions about your rights as a research subject, please call the University of Florida Institutional Review Board (IRB) office at (352) 273-9600.

a) In general, what is the purpose of the research, how long will you be involved?

The purpose of this research study is to understand the effects of nerve stimulation on thinking and memory in people who have difficulty with some aspect of thinking, as well as healthy older adults.

b) What is involved with your participation, and what are the procedures to be followed in the research?

You will perform an intake session, where you will sign an informed consent. We will administer a health history questionnaire and tests of memory, cognition, and mood.

You will receive an MRI scan, during which you will receive vagal nerve stimulation partway through the sequence.

You will participate in two cognitive testing sessions, where you will receive one of two forms of stimulation (one during each session), and we will administer tests of thinking and memory to assess the effect of the stimulation.

c) What are the likely risks or discomforts to you?

The MRI scan cannot be performed if you have certain devices or implants in your body. We will conduct a screening form to identify potential MRI contraindications. We will administer tests of memory and thinking, which can be frustrating to individuals who have thinking and memory problems. We will also administer questionnaires about mood, which can be uncomfortable.

We will administer vagal nerve stimulation, which can cause discomfort at the stimulation site. This usually dissipates shortly after stopping stimulation.

d) What are the likely benefits to you or to others from the research?

This is a study of the mechanism of a potential tool for improving thinking in people with mild cognitive impairment. Thus, you may experience a temporary improvement in thinking. No long-term benefits are expected from participation in

this study but we may eventually develop this tool in to a viable treatment for enhancing thinking in people with mild cognitive impairment.

e) What are the appropriate alternative procedures or courses of treatment, if any, that might be helpful to you?

Mild cognitive impairment can be treated or ameliorated through a variety of interventions. You should consult with your primary care physician or neurologist to determine the best avenue of treatment for your specific case.

Additional and more detailed information is provided within the remainder of this Informed Consent form, please read before deciding if you wish to participate in this study.

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.

WHAT CAN YOU EXPECT IF YOU PARTICIPATE IN THIS STUDY?

6. What will be done as part of your normal clinical care (even if you did not participate in this research study)?

This is a research study and will not affect your normal clinical care. Parts of our evaluation are sometimes used in clinical settings. All data collected in this study are intended for research purposes. Though some tests that we use are also used in clinical assessments, we are not evaluating the tests in that manner and, thus, no clinical judgments will be made. If you have any issues that you need to address, clinically, please contact the appropriate professional. If, in the course of examining the data, one of the researchers notices something that may be clinically significant, we will attempt to notify you and suggest action. For example, you will be asked about thoughts regarding self-harm (suicide). If you say you are thinking about suicide, we may refer you to emergency services.

7. What will be done only because you are in this research study?

1) **Behavioral (thinking) Assessments**: These tasks will consist of paper and pencil tests of things like how fast you can complete tasks with numbers, test of memory skills, drawing skills, or organizational skills. Emotional and other tasks will consist of questionnaires that will assess things like depression and anxiety.

2) **Non-invasive Vagal Nerve Stimulation:** If you are a woman of child bearing potential, we will perform a pregnancy test and the result must be negative to receive stimulation. If you decide to take part in this study, you will receive two different stimulations during two different testing sessions (tasks). Stimulation will

be completed with an external/transcutaneous vagal nerve stimulator (tVNS). You will receive stimulation for up to 60 minutes continuously. A small stimulating electrode similar to an earbud headphone or a soft earplug will be placed in your ear canal. This stimulus intensity will be adjusted from 0 (nothing) up to a level which is effective but not painful or particularly uncomfortable, described as "comfortable electro-massaging sensation" in previous studies of this kind of stimulation. You might also feel a slight tingling or prickling sensation during stimulation.

3) **Magnetic Resonance Imaging (MRI) Scans**: MRI is a procedure that allows doctors to look inside the body by using a scanner that sends out a strong magnetic field and radio waves. This procedure is used routinely for medical care and is very safe for most people, but you will be monitored during the entire MRI scan in case any problems occur. While in the scanner you will either lie still or undergo cognitive tasks on a projected computer screen.

Once this research study is completed, any information that could identify you **might** be removed from any identifiable private information or identifiable biospecimens collected and that, after such removal, the information or biospecimens could be used for future research studies or distributed to another investigator for future research studies without additional informed consent from you or your legally authorized representative

If you have any questions now or at any time during the study, please contact one of the research team members listed in question 3 of this form.

8. How long will you be in this research study?

After intake, approximately 6 hours across three assessment periods spaced at least 72 hours apart, or 1 week apart for cognitive sessions

9. How many people are expected to take part in this research study?

About 325 people.

WHAT ARE THE RISKS AND BENEFITS OF THIS STUDY AND WHAT ARE YOUR OPTIONS?

10. What are the possible discomforts and risks from taking part in this research study?

1) **Behavioral (cognitive or thinking) Assessments:** Some people find tests of thinking to be frustrating, therefore frustration is a risk. Further, questions about mood and personality can sometimes be uncomfortable (e.g., talking about things that make you sad or anxious).

2) **Non-invasive Vagal Nerve Stimulator:** Previous studies using electrical stimulation found that some side effects may occur including itching, discomfort, and local pain at the stimulation site. These side effects usually end shortly after stopping stimulation. If the electrodes are not well placed then you might experience mild pain, although the researchers will adjust the electrode placement if this happens.

3) **The risks of MRI are**: The MRI scanner contains a very strong magnet. Therefore, you may not be able to have the MRI if you have any type of metal implanted in your body, for example any pacing device (such as a heart pacer), metal in your eyes, or certain types of heart valves or brain aneurysm clips. Study personnel will complete a questionnaire about this with you before you undergo an MRI.

   There is not much room inside the MRI scanner. You may be uncomfortable if you do not like to be in close spaces ("claustrophobia"). During the procedure, you will be able to talk to the MRI staff through the speaker system, and, in the event of an emergency, you can tell them to stop the scan. The MRI scanner produces a loud hammering noise, which has produced hearing loss in a very small number of patients. You will be given earplugs as well as headphones to reduce this risk.

   You may experience a temporary decrease in your hearing abilities, accompanied by a ringing in the ears. This should stop within 48 hours from the time you were scanned. If this does not stop within 48 hours please contact the principal investigator listed in #3 of this form.

   You should stay away from loud noise environments for 24 hours after you have been scanned. Examples of a loud noise environment include mowing the lawn, riding on a motorcycle, and attending a music concert or sporting event. If you must be in a loud noise environment you should use hearing protection. We will provide you with foam earplugs for this purpose and we will show you how to use them. MRI's done for research purposes may not be reviewed with the same scrutiny as those performed for your specific healthcare needs and therefore should not be viewed as a substitute for a clinical scan.

If you have any questions now or at any time during the study, please contact one of the research team members listed in question 3 of this form.

Researchers will take appropriate steps to protect any information they collect about you. However, there is a slight risk that information about you could be revealed inappropriately or accidentally. Depending on the nature of the information, such a release could upset or embarrass you, or possibly affect your insurability or employability. Questions 17-21 in this form discuss what information about you will be collected, used, protected, and shared.

This study may include risks that are unknown at this time.

Participation in more than one research study or project may further increase the risks to you. If you are already enrolled in another research study, please inform one of the

research team members listed in question 3 of this form or the person reviewing this consent with you before enrolling in this or any other research study or project.

Throughout the study, the researchers will notify you of new information that may become available and might affect your decision to remain in the study.

If you wish to discuss the information above or any discomforts you may experience, please ask questions now or call one of the research team members listed in question 3 in this form.

11a. What are the potential benefits to you for taking part in this research study?

This is a study of the mechanism of a potential tool for improving thinking in people with mild cognitive impairment. Thus, you may experience a temporary improvement in thinking. No long term benefits are expected from this study.

11b. How could others possibly benefit from this study?

If we are able to identify an effective tool for improving thinking in people with mild cognitive impairment and develop it as a treatment, many people may benefit from improved quality of life associated with better thinking performance.

11c. How could the researchers benefit from this study?

In general, presenting research results helps the career of a scientist. Therefore, the Principal Investigator listed in question 3 of this form may benefit if the results of this study are presented at scientific meetings or in scientific journals.

12. What other choices do you have if you do not want to be in this study?

Research participation is entirely voluntary. If you do not wish to participate, please tell the research staff member and do not sign this consent form.

13a. Can you withdraw from this study?

You are free to withdraw your consent and to stop participating in this study at any time. If you do withdraw your consent, you will not be penalized in any way and you will not lose any benefits to which you are entitled. If you decide to withdraw your consent to participate in this study for any reason, please contact one of the research team members listed in question 3 of this form. They will tell you how to stop your participation safely.

If you have any questions regarding your rights as a research subject, please call the Institutional Review Board (IRB) office at (352) 273-9600.

13b. If you withdraw, can information about you still be used and/or collected?

If you withdraw from this study, your research information will no longer be collected. However, information that has already been collected will continue to be used to the extent that the researchers have used it in this research study.

13c. Can the Principal Investigator withdraw you from this study?

You may be withdrawn from the study without your consent for the following reasons:

- You are unable to understand the directions for the study.
- You do not meet the eligibility criteria for the study including medical history and other aspects necessary for the study.
- You show signs of discomfort from the procedure

WHAT ARE THE FINANCIAL ISSUES IF YOU PARTICIPATE?

14. If you choose to take part in this research study, will it cost you anything?

No. There will be no extra cost to you for participating in this Research Study.

15. Will you be paid for taking part in this study?

You will be paid $150.00 at the completion of the study. This amount will be pro-rated if you do not complete all sessions of the study. You will also receive $20 per day for gas/expenses (maximum of $40/2 days travel reimbursement) if you live more than 20 miles from the University of Florida. Your name and social security number will be reported to the appropriate University employees for purposes of making and recording the payment as required by law. You are responsible for paying income taxes on any payments provided by the study. Payments to ***nonresident aliens*** must be processed through the University of Florida Payroll and Tax Services department. If the payments total $600 or more in a calendar year, the University must report the amount you received to the Internal Revenue Service (IRS). The IRS is not provided with the study name or its purpose. If you have questions about the collection and use of your Social Security Number, please visit: http://privacy.ufl.edu/SSNPrivacy.html.

Your payment for participation in this research study is handled through the University of Florida's Human Subject Payment (HSP) Program. Your information which will include your name, address, date of birth, and SSN (depending on amount of money you are paid) is protected. Access to the (HSP) Program site is limited to certain staff with the assigned security role. You will be randomly assigned a specific identification (ID) number to protect your identity.

16. What if you are injured because of the study?

Please contact one of the research team members listed in question 3 of this form if you experience an injury or have questions about any discomforts that you experience while participating in this study.

17. How will your health information be collected, used and shared?

If you agree to participate in this study, the Principal Investigator will create, collect, and use private information about you and your health. This information is called protected health information or PHI. In order to do this, the Principal Investigator needs your authorization. The following section describes what PHI will be collected, used and shared, how it will be collected, used, and shared, who will collect, use or share it, who will have access to it, how it will be secured, and what your rights are to revoke this authorization.

Your protected health information may be collected, used, and shared with others to determine if you can participate in the study, and then as part of your participation in the study. This information can be gathered from you or your past, current or future health records, from procedures such as physical examinations, x-rays, blood or urine tests or from other procedures or tests. This information will be created by receiving study treatments or participating in study procedures, or from your study visits and telephone calls. More specifically, the following information may be collected, used, and shared with others:

- Name
- Contact Information
- Date of Birth
- Socio-economic status
- Education
- Social Security Number for the purpose of compensation
- Past and present medical History
- Height and Weight
- Memory and thinking tests
- MRI safety screening
- MRI images and results

This information will be stored in locked filing cabinets or on computer servers with secure passwords, or encrypted electronic storage devices.

Some of the information collected could be included in a "limited data set" to be used for other research purposes. If so, the limited data set will only include information that does not directly identify you. For example, the limited data set cannot include your name, address, telephone number, social security number, photographs, or other codes that link you to the information in the limited data set. If limited data sets are

created and used, agreements between the parties creating and receiving the limited data set are required in order to protect your identity and confidentiality and privacy.

18. For what study-related purposes will your protected health information be collected, used, and shared with others?

Your PHI may be collected, used, and shared with others to make sure you can participate in the research, through your participation in the research, and to evaluate the results of the research study. More specifically, your PHI may be collected, used, and shared with others for the following study-related purpose(s):

- To understand the effects of transcutaneous vagal nerve stimulation on cognitive performance.

Once this information is collected, it becomes part of the research record for this study.

19. Who will be allowed to collect, use, and share your protected health information?

Only certain people have the legal right to collect, use and share your research records, and they will protect the privacy and security of these records to the extent the law allows. These people include:

- the study Principal Investigator (listed in question 3 of this form) and research staff associated with this project.
- other professionals at the University of Florida or Shands Hospital that provide study-related treatment or procedures.
- the University of Florida Institutional Review Board (IRB; an IRB is a group of people who are responsible for looking after the rights and welfare of people taking part in research).

20. Once collected or used, who may your protected health information be shared with?

Your PHI may be shared with:

- the study sponsor (listed in Question 4 of this form).
- United States governmental agencies who are responsible for overseeing research, such as the Food and Drug Administration, the Department of Health and Human Services, and the Office of Human Research Protections .
- Government agencies who are responsible for overseeing public health concerns such as the Centers for Disease Control and federal, state and local health departments.

Otherwise, your research records will not be released without your permission unless required by law or a court order. It is possible that once this information is shared with

authorized persons, it could be shared by the persons or agencies who receive it and it would no longer be protected by the federal medical privacy law.

21. If you agree to take part in this research study, how long will your protected health information be used and shared with others?

Your PHI will be used and shared with others until the end of the study.

You are not required to sign this consent and authorization or allow researchers to collect, use and share your PHI. Your refusal to sign will not affect your treatment, payment, enrollment, or eligibility for any benefits outside this research study. However, you cannot participate in this research unless you allow the collection, use and sharing of your protected health information by signing this consent and authorization.

You have the right to review and copy your protected health information. However, we can make this available only after the study is finished.

You can revoke your authorization at any time before, during, or after your participation in this study. If you revoke it, no new information will be collected about you. However, information that was already collected may still be used and shared with others if the researchers have relied on it to complete the research. You can revoke your authorization by giving a written request with your signature on it to the Principal Investigator.

SIGNATURES

As an investigator or the investigator's representative, I have explained to the participant the purpose, the procedures, the possible benefits, and the risks of this research study; the alternative to being in the study; and how the participant's protected health information will be collected, used, and shared with others:

Signature of Person Obtaining Consent and Authorization	Date

You have been informed about this study's purpose, procedures, possible benefits, and risks; the alternatives to being in the study; and how your protected health information will be collected, used and shared with others. You have received a copy of this Form. You have been given the opportunity to ask questions before you sign, and you have been told that you can ask questions at any time.

You voluntarily agree to participate in this study. You hereby authorize the collection, use and sharing of your protected health information as described in sections 17-21 above. By signing this form, you are not waiving any of your legal rights.

Signature of Person Consenting and Authorizing	Date