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: _____

GENERAL INFORMATION ABOUT THIS STUDY

1. Name of Participant ("Study Subject")

_____

2. What is the Title of this research study (this "Research Study")?

Gut Inflammation and Gut-Gut Microbiome Interactions in the Pathogenesis of Hypertension.

3. Whom do you call if you have questions about this Research Study (the "Study Team")?

Principal Investigator: Carl J. Pepine, MD at (352) 273-9082
Co-Investigator: Chris Forsmark, MD at (352) 273-9400

Mohan K Raizada, PhD (352) 392 9299

Eileen Handberg, PhD. ARNP-BC (352) 627-4293

After hours or in an emergency please call: (352) 273-5550

4. Who is paying for this Research Study?

The sponsor of this study is the NIH that has awarded a grant to the University of Florida College of Medicine.

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 learn more about how the gut affects the development and progression of hypertension (high blood pressure). GI alterations such as gut leakiness, gut inflammation, and gut pathology have been linked to hypertension in animal models of hypertension, as well as changes in the populations of bacteria living in the gut (the gut microbiome). There are similar changes in the bacteria living in the gut of people with hypertension and there are markers in the blood that suggest there are gut leakiness and inflammation, too. In this research study, we plan to study two things. First, whether there are molecular differences in the cells lining the gut of people with high blood pressure compared to those with normal blood pressure. Second, we will determine if there are differences in the growth and development of cultures of these cells, as well as how those cells in culture interact with the prohypertensive signals such as high salt. We will obtain the cells from biopsies of the colon from people with hypertension but otherwise good health and compare these to cells of healthy people without high blood pressure.

You are being asked to be in this research study because you have expressed interest in research studies and have hypertension or because you have expressed an interest in research studies and do not have hypertension.

You will be in this study until your colonoscopy and related biopsies have been processed. Typically, this is only one week after the colonoscopy has been completed.

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

We will collect research colon biopsy samples for this study.

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

There is a risk of persistent bleeding or perforation during any colonoscopy, including screening colonoscopy as described in section 12 of this form.

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

There is no direct benefit to you for participating in this study. It is possible that this study may identify the causes of hypertension for others.

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

You can choose not to participate in this research 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.

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.

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)?

You will be having a standard of care colonoscopy as part of your normal care. Your clinical care will otherwise not be affected whether you choose to take part in this study or not.

The following tests would usually be done before and during the procedure:

- Vital signs-Your pulse, temperature and blood pressure will be monitored
- Past medical history including medications
- Family history
- Biopsies to check for causes of diarrhea, inflammation or cancer
- Pregnancy test prior to endoscopy

7. What will be done only because you are in this Research Study?

If you are enrolled in the study, you will allow the researchers and others designated by the investigator to use the information collected for research. We may review your medical record. All this information will be entered into a password protected, limited access computer database at the University of Florida.

Visit 1:

For women of childbearing potential, a pregnancy test will be administered. If you are pregnant, you will not be able to continue in this study.

Tissue biopsy collection

During your scheduled colonoscopy, for research purposes only, a maximum of 4 biopsies will be taken from your colon. The biopsy samples are only the size of a pencil tip. We will culture intestinal stem cells from the collected tissue to investigate how the hypertension affects the behavior of the cells. We will also use the biopsy tissue to isolate molecules from the cells which allow us to determine how your gut lining works. The tissue/cell sample will be coded (labeled only with your study ID number and date of the biopsy taken).

Medical information data collection

We will collect the following patient information (current symptoms, medical history, surgical history, imaging studies, lab results, medication history, allergies, social history, family history, physical exam findings, colonoscopy reports, pathology reports, alcohol and tobacco use) that will be gathered from your medical record. These medical record data will be correlated with the study results to determine their role in hypertension.

The results of the following tests are being done for research purposes only and might not be evaluated or used to diagnose/ treat the participant's medical problems. The results may not be entered into the participant's medical record. The following tests may need to be repeated by the participant's primary care doctor if required for the participant's medical care in the future:

1. Study-related labs sent to Dr. Pepine's collaborator, Dr. Raizada's, lab

If you have any questions now or at any time during the study, please contact Dr. Pepine or the study staff at 352-273-5550.

All samples will be stored in the Dr. Raizada Lab at the McKnight Brain Institute at the University of Florida until the conclusion of the study. You may request in writing to Dr. Mohan Raizada or Dr. Pepine if you wish to destroy your samples at any time.

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 this Research Study, please contact one of the Research Team members listed in question 3 of this form.

8. What identifiable health information will be collected about you and how will it be used?

The Research Team will collect complete past medical history, alcohol and tobacco use, imaging studies, endoscopy reports, pathology and lab results, results from gut analysis, ability to become pregnant, your name and contact information.

The Research Team may collect this information from other healthcare providers, such as laboratories, which are a part of this research, as well as healthcare providers that are not part of this research (other doctors, hospitals or clinics). Other professionals at the University of Florida or Shands Hospital who provide study-related care, and the University of Florida Institutional Review Board (IRB), may also collect your health information.

The Research Team listed in question 3 above will use or share your health information as described below to carry out this research study.

9. With whom will this health information be shared?

This health information may be shared with:

- the study sponsor (listed in Question 4 of this form);
- United States governmental agencies which 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 which are responsible for overseeing public health concerns such as the Centers for Disease Control and federal, state and local health departments.
- Your insurance company for purposes of obtaining payment.
- The IRB that reviewed this Research Study and ensures your rights as a Study Subject are protected.

Otherwise, your identifiable health information will not be shared without your permission unless required by law or a court order. Once your health information is shared with those listed above, it is possible that they could share it without your permission because it would no longer be protected by the federal privacy law.

10. How long will you be in this Research Study?

Participants will be in this study until your colonoscopy and related biopsies have been processed. Typically, this is only one week after the colonoscopy has been completed.

This Authorization to use and share your health information expires at the end of the study, unless you revoke it (take it back) sooner.

11. How many people are expected to take part in this Research Study?

We will enroll 30 people with hypertension and 30 without (healthy controls). A total of 60 subjects will be needed to complete this study. Up to 70 people might enter this study, in order to have 30 people with high blood pressure and 30 people without to complete the biopsies and necessary chart information gathering successfully.

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

12. What are the possible discomforts and risks from taking part in this Research Study?

The risks and discomforts of biopsies during a colonoscopy include persistent bleeding after biopsy or a perforation of the wall of the colon which might require surgery. The biopsies are only the size of a pencil tip and the risk of bleeding, infection or perforation are minimal (less than 0.1% or 1 in a thousand people).

This Research Study may also include risks that are unknown at this time.

Please note, participating in more than one research study or project may further increase the risks to you. If you are already enrolled in a 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.

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

The University of Florida is required by law to protect your health information. Your health information will be stored in locked filing cabinets or on computer servers with secure passwords, or encrypted electronic storage devices, as required by University policy. However, there is a slight risk that information about you could be released inappropriately or accidentally. Depending on the type of information, a release could upset or embarrass you, or possibly affect your ability to get insurance or a job.

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.

13a. What are the potential benefits to you for taking part in this Research Study?

There is no direct benefit to you for participating in this research study.

13b. How could others possibly benefit from this Research Study?

The information obtained may help our understanding of how the gut affects development and progression of hypertension which may lead to new treatments that might benefit others in the future.

13c. How could the Research Team members benefit from this Research Study?

In general, presenting research results helps the career of a researcher. Therefore, the Research Team listed in question 3 of this form may benefit if the results of this Research Study are presented at scientific meetings or in scientific journals.

13d. Will you be allowed to see the research information collected about you for this Research Study?

You may not be allowed to see the research information collected about you for this Research Study, including the research information in your medical record. When this Research Study is over, you will be allowed to see any research information collected and placed in your medical record.

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

If you do not want to be in this study, tell the representative speaking with you that you don't want to participate and do not sign this form. Your other choice is not to participate.

You may also refuse to authorize the use of your health information, but if you refuse, you may not be allowed to be in this research study or receive any research-related treatment that is only available in this research study. However, your decision not to sign this Authorization will not affect any other treatment you may be eligible to receive.

15a. Can you withdraw from this study?

You may withdraw your consent and stop participating in this Research Study at any time. If you do withdraw your consent, there will be no penalty to you, and you will not lose any benefits to which you are otherwise entitled.

If you decide to withdraw your consent to participate in this Research Study for any reason, please contact the Research Team listed in question 3 of this form. They will tell you how to safely stop your participation.

You can also change your mind and take back this Authorization at any time by sending a written notice to the Research Team listed in question 3 of this form to let them know your decision. If you take back this Authorization, the Research Team may only use and disclose your health information already collected for this research study. No additional health information about you will be collected or disclosed to the Research Team. However, if you take back this Authorization, you may not be able to continue in this study. Please discuss this with a member of the Research Team listed in question #3.

15b. Can the Principal Investigator withdraw you from this Research Study?

You may be withdrawn from this Research Study without your consent for the following reasons:

- Your sample is determined to be infectious.
- The research study is being stopped.
- The investigator believes that it is in your best interest.

WHAT ARE THE FINANCIAL ISSUES IF YOU PARTICIPATE?

16. If you choose to take part in this Research Study, will it cost you anything?

No, there will be no additional costs to you or your health plan as a result of your participation in this study. There are no expected protocol-required items, services or procedures that will generate any charges at UF Health. However, if you feel you have received a bill related to this study, please contact the Principal Investigator.

If you receive any healthcare at UF Health that is not related to this study, this care will be billed as usual.

17. Will you be paid for taking part in this Research Study?

No, you will not be paid.

18. What if you are injured while in this Research Study?

Since this is an observational study, there is a very low risk of study-related injury. However, If you are injured as a direct result of your participation in this study, only the professional services that you receive from any University of Florida Health Science Center healthcare provider will be provided without charge. These healthcare providers include physicians, physician assistants, nurse practitioners, dentists or psychologists. Any other expenses, including Shands hospital expenses, will be billed to you or your insurance provider.

You will be responsible for any deductible, co-insurance, or co-payments. Some insurance companies may not cover costs associated with research studies or research-related injuries. Please contact your insurance company for additional information.

The Principal Investigator will determine whether your injury is related to your participation in this study.

No additional compensation is routinely offered. The Principal Investigator and others involved in this study may be University of Florida employees. As employees of the University, they are protected under state law, which limits financial recovery for negligence.

Please contact Dr. Pepine at (352) 273-5550 if you experience an injury or have questions about any discomforts that you experience while participating in this study.

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 above. By signing this form, you are not waiving any of your legal rights.

Signature of Person Consenting and Authorizing	Date