UNIVERSITY OF MICHIGAN

CONSENT TO BE PART OF A RESEARCH STUDY

1. KEY INFORMATION ABOUT THE RESEARCHERS AND THIS STUDY

Study title:

Diabetic Foot Ulcer (DFU) Rapid Pathogen Identification

Company or agency sponsoring the study:

National Institutes of Health (NIH) / National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)

Principal Investigator:

Brian M. Schmidt, DPM, Department of Internal Medicine, Division of Metabolism, Endocrinology and Diabetes

Study Coordinator:

Kourtney Noll, BHA; Clinical Research Coordinator; Department of Internal Medicine, University of Michigan

1.1 Key Study Information

You may be eligible to take part in a research study. This form contains important information that will help you decide whether to join the study. Take the time to carefully review this information. You should talk to the researchers about the study and ask them any questions you have. You may also wish to talk to others such as your family, friends, or other doctors about joining this study. If you decide to join the study, you will be asked to sign this form before you can start study-related activities. Before you do, be sure you understand what the research study is about.

A research study is different from the regular medical care you receive from your doctor. Research studies hope to make discoveries and learn new information about diseases and how to treat them. You should consider the reasons why you might want to join a research study or why it is not the best decision for you at this time.

Research studies do not always offer the possibility of treating your disease or condition. Research studies also have different kinds of risks and risk levels, depending on the type of the study. You may also need to think about other requirements for being in the study. For example, some studies require you to travel to scheduled visits at the study site in Ann Arbor or elsewhere. This may require you to arrange travel, change work schedules, find childcare, or make other plans. In your decision to participate in this study, consider all these matters carefully.

This research is studying the use of polymerase chain reaction (PCR) and metagenomic next generation sequencing (mNGS) techniques in a small number of people to learn about its ability to identify pathogens and assist in treatment of diabetic foot ulcer infection. This study will test the clinical feasibility of using PCR and mNGS techniques to correctly predict antibiotic therapy for the identified pathogens in diabetic foot ulcer infection. Your health-related information and wound debridement tissue will be collected for this research study.

This study involves a process called randomization. This means that the device used to identify pathogens in your diabetic foot ulcer infection in the study is not chosen by you or the researcher. The study design divides study participants into separate groups, based on chance (like the flip of a coin), to compare different treatments or procedures. If you decide to be in the study, you need to be comfortable not knowing which study group you will be in.

There can be risks associated with joining any research study. The type of risk may impact whether you decide to join the study. This study does not involve any medicines. For this study, some of these risks include discomfort at the site of the wound debridement to collect tissue for culture and the duration of time spent at the study visit. More detailed information will be provided later in this document. This study will involve up to two in-person visits.

This study may or may not offer any benefit to you now but may benefit others in the future by helping doctors prevent severe diabetic foot infection symptoms and outcomes in people with diabetes. More information will be provided later in this document.

We expect the amount of time you will participate in the study will be about 2 hours.

You can decide not to be in this study. You will continue your standard of care treatment for both your diabetes and your diabetic foot ulcer follow-up regardless of your participation in this study.

Even if you decide to join the study now, you are free to leave at any time if you change your mind.

More information about this study continues in Section 2 of this document.

2. PURPOSE OF THIS STUDY

2.1 Study purpose:

This research is being done because people with diabetes have reduced healing capacity and are prone to develop infections of their foot wounds. This can be problematic because wounds that become infected may result in amputation and more severe complications. New evidence suggests that a better understanding of the microbiome of wounds (e.g., bacterial presence) may provide information about wound healing and provide an earlier opportunity to intervene once an individual develops diabetic foot infection in their wound. Ultimately, this may improve healing time by improving treatment of infection. Therefore, the purpose of this study is to evaluate the role of rapid diagnosis of pathogens in treatment of infection and wound healing in diabetic foot ulcers. Once the role of early pathogen identification on outcomes is defined, additional progress towards the prevention and treatment of diabetic foot ulcers and complications may be possible.

3. WHO MAY PARTICIPATE IN THE STUDY

Taking part in this study is completely **voluntary**. You do not have to participate if you don't want to. You may also leave the study at any time. If you leave the study before it is finished, there will be no penalty to you, and you will not lose any benefits to which you are otherwise entitled.

3.1 Who can take part in this study?

You are eligible for the study if you have diabetes mellitus and have a diagnosed diabetic foot ulcer infection or wound. Taking part in this study is completely **voluntary**. You do not have to participate if you don't want to. You may also leave the study at any time. If you leave the study before it is finished, there will be no penalty to you, and you will not lose any benefits to which you are otherwise entitled.

3.2 How many people are expected to take part in this study?

We will enroll approximately 44 people in this study.

4. INFORMATION ABOUT STUDY PARTICIPATION

4.1 What will happen to me in this study?

Study/Study Procedures

Generally, this study will require two in-person visit with the research study team. Participation in this study requires that you receive assessment and care of your diabetic foot ulcer infection for 12 weeks and be monitored for wound healing and/or infection resolution over the duration of the study. You will receive regular care for diabetic foot ulcer infection by your physician during this study.

Wound tissue that is removed (debrided) from your foot ulcer as a part of usual care will be collected and sent for conventional bacterial culture, and used to evaluate the wound for pathogens that can then be treated with antibiotics. Rapid diagnostic techniques such as PCR and mNGS can identify pathogens more rapidly in cases of bacterial infection. This may allow their physician to prescribe antibiotics specific to the pathogen causing the diabetic foot ulcer infection faster. You will be randomized into one of two groups, a conventional culture only group or a conventional culture and rapid diagnostic group. Your regular physician will provide all care during this study.

The probability for random assignment to each group is 50%, like the flip of a coin.

- For those randomized into the conventional culture group, only conventional cultures will be obtained and used for treatment.
    - For conventional culture, this usually takes 4-6 days following culture of tissue in clinic.
- For those randomized into the rapid pathogen identification group, in addition to conventional bacterial culture, a portion of the sample collected for conventional bacterial culture will be analyzed using PCR and mNGS techniques. Your treating physician will then be presented with the data derived from these rapid diagnostic techniques and you may receive additional or different treatment for your diabetic foot ulcer infection.
    - For PCR and mNGS, this usually takes 24-36h following culture of tissue in clinic.

Following collection of this tissue at the in-person visit, you will continue to receive usual care per your provider's discretion and followed for a period of 12 weeks until either: your wound heals, your wound does not heal, or your wound continues to be infected. All participants will receive standard diabetic foot ulcer and wound care.

As a subject participating in this research study, you will have certain responsibilities, such as ensuring that you arrive at all your scheduled appointment and follow recommended care and study guidelines as directed. For example, if your provider recommends you wear an offloading type device (e.g., boot), it is important to follow the physician's recommendations. All participants, regardless of clinical outcome by study end, will add substantial value to the study; and it is important to follow all directions as instructed.

VISIT 1

Visit 1 will take approximately **2 hours** to complete. The information gathered during this visit will determine your final eligibility for this study.

You will be asked to arrive at a clinical site at Domino's Farms or West Ann Arbor or Brighton Center for Specialty Care or the Comprehensive Wound Care Center at your scheduled appointment time. If not consented previously online, a member of the research team will go through the informed consent document with you in detail and answer any questions you may have about the study.

Once the informed consent has been read, fully understood, and signed, and you agree to participate in the study, a research team member or University of Michigan staff member will take basic measurements of height, weight, blood pressure, and heart rate.

Additional tests that will occur during Visit 1 are: completion of a comprehensive medical history questionnaire, Michigan Neuropathy questionnaires, and an assessment of the foot ulcer or wound. These tests may be performed at whichever Clinical site you receive care for your foot ulcer at (e.g., Domino's Farms).

All procedures for Visit 1 are described in detail below:

- **Comprehensive Medical History and Michigan Neuropathy Questionnaires:** You will complete a set of questionnaires that asks you questions about the medical history; medication use and symptoms pertaining to the current diabetic foot ulcer being study. These questionnaires will take about 20 minutes to complete.
- **Abstraction of Patient Associated Data:** Sex, race, body mass index (BMI), and clinical factors including glucose control (total blood glucose and hemoglobin A_{1c}[HbA_{1c}]), inflammation markers within 3 months of enrollment visit (white blood cell count [WBC], western sedimentation rate [ESR], C-reactive protein [CRP]), co-morbid conditions (Charlson Comorbidity Index [CCI]), and medication use (dose and frequency) will be recorded. If blood work on glucose control and inflammation markers within 3 months of enrollment visit are not available, participants will be asked to provide a blood sample.
- **Wound/Ulcer assessment:** Dressings will be removed to expose the wound or ulcer and pictures of the wound will be taken to measure the area of the wound on image analysis software. Only an image of the would/ulcer area will be captured; nobody would be able to identify you from the pictures. Wound depth

will be measured using a sterile cotton tipped applicator. New sterile dressings will be applied by you or the study team to cover and protect the wound after measurements. Wounds will also be assessed for signs of infection (increased redness and swelling around the wound, increased wound drainage, or foul odor). This test may take up to 30 minutes to complete.

- **Wound Debridement Tissue Collection:** At this study visit the study team will collect "to-be- discarded" wound debridement tissue from your debridement procedure, to measure for the presence of pathogens from the microbiome in your diabetic foot ulcer. This will come after a clinical sample is obtained for conventional bacterial culture techniques to treat your diabetic foot ulcer infection. The microbiome is the combined genetic material of the microorganisms in a particular environment. With your permission, we will also store your samples for future research. These tests may include DNA analysis (this is explained further later in this document). No labs for research purposes will be run through the university clinical specimen processing so you will not see these results.

VISIT 2

Visit 2 will consist of regular care of your diabetic foot ulcer at the discretion of your podiatrists. No study procedures are scheduled during the visit. We will abstract wound dimension data (wound surface area and wound surface volume) and DFU infection status data, if applicable, following your visit through review of your electronic medical record.

VISIT 3:

Visit 3 will consist of regular care of your diabetic foot ulcer at the discretion of your podiatrists. No study procedures are scheduled during the visit. We will abstract wound dimension data (wound surface area and wound surface volume) and DFU infection status data, if applicable, following your visit through review of your electronic medical record.

VISIT 4

Visit 4 will consist of regular care of your diabetic foot ulcer at the discretion of your podiatrists. No study procedures are scheduled during the visit. We will abstract wound dimension data (wound surface area and wound surface volume) and DFU infection status data, if applicable, following your visit through review of your electronic medical record.

VISIT 5:

Visit 5 will consist of regular care of your diabetic foot ulcer at the discretion of your podiatrists. No study procedures are scheduled during the visit. We will abstract wound dimension data (wound surface area and wound surface volume) and DFU infection status data, if applicable, following your visit through review of your electronic medical record.

FINAL STUDY VISIT:

The Final Study Visit will be an in-person visit consisting of an assessment by a member of the study team to evaluate if your wound has healed, remains non-healing, or has continued infection. The final study visit may occur before the planned 12-week study period. If you wound remains open, we will abstract wound dimension data (wound surface area and wound surface volume) following your visit through review of your electronic medical record. After the completion of Final Study Visit your participation in the study will end.

Scheduling Flexibility

Due to scheduling matters, study team and/or clinic availability, some procedures may be excluded or adjusted from any given visit. Excluded or adjusted procedures will be at the discretion of the Principal Investigator (Dr. Schmidt), and you will be notified of any changes.

Genomic data

We will collect and store information about your genes. The DNA contained in your genes holds the instructions that your body uses to grow and function. Your genes are responsible for your physical features such as eye color, blood type, and how your body breaks down medications. Genes can also be responsible for some medical conditions.

Genomic information relates to the structure and function of all the genetic material in the body.

We will submit your genomic information to a repository to be used for scientific purposes. A repository contains information from many people. Some repositories are maintained by the University of Michigan, some are maintained by the federal government, and some are maintained by private companies.

Researchers all over the world can take information from the repository and use it in their studies. Their studies may be like this one or may be completely different.

We will label your genomic information with a code, instead of your name or other information that people could use to directly identify you. Even so, there is a possibility that when your genomic information is combined with other information available to researchers, either now or in the future, they may be able to identify a group you belong to (like an ethnic group or a disease population) or, less likely, you personally.

If you allow us to put your genomic information in the repository, you can change your mind later and ask us to remove it. Keep in mind, however, that we cannot take back information that other researchers have already obtained from the repository.

Future use of samples

Besides the information about the main study, the following information is specific to unspecified future use of identifiable data and/or biospecimens. We would also like your permission to keep some of your blood and medical information collected in the main study, so that we may study it in future research. The future research may be like this study or may be completely different.

You can take part in the main study even if you decide not to let us keep your blood and medical information for future research. Permission for this will be granted at the end of this document.

If you give us your permission, we will use your blood and medical information for future research. Even if you give us permission now to keep some of your blood and medical information, you can change your mind later and ask us to destroy it. Keep in mind, however, that once we have analyzed your blood, we may not be able to take the information out of our research.

We may share your blood and medical information with other researchers, so that they can use it in their research. Their research may be like this study or may be completely different. Once we have shared your blood and medical information with other researchers, we will not be able to get it back.

Future use of your identifiable data and/or specimens will be conducted in compliance with applicable regulatory requirements.

You will not find out the results of future research on your blood samples. Allowing us to do future research on your blood and medical information will not benefit you directly.

4.2 How much of my time will be needed to take part in this study?

Your participation in this study will last approximately 12 weeks. There is a total of about 6 visits in this study (depending on your schedule). There is 1 in-person visit where biospecimen (wound tissue) and data will be collected, 1 in-person visit to confirm your outcome (Final Study Visit) and two visits where we record information documented in your electronic health record (Visit 3, Visit 5).

4.3 When will my participation in the study be over?

Your physical participation in this study will be over after you have completed the Final Study Visit, the last in-person study visit to confirm if your wound has healed, remains non-healing, or has developed an infection. The sample(s) collected from your participation will be stored to be tested after you have completed the study visit.

4.4 What will happen with my information and/or biospecimens used in this study?

With appropriate permissions, your biospecimens and collected information may also be shared with other researchers, here, around the world, and with companies.

Your identifiable private information or identifiable biospecimens may be stripped of identifiers and used for future research studies or distributed to another researcher for future research studies without additional informed consent.

5. INFORMATION ABOUT STUDY RISKS AND BENEFITS

5.1 What risks will I face by taking part in the study? What will the researchers do to protect me against these risks?

The known or expected risks are:

- **Time:** There is time involved in the study. The study visit will take up to 2 hours.
- **Blood Draw**: The risks of drawing blood from a vein includes discomfort at the site of the needle stick, possible bruising and swelling around the site of the needle stick, rarely an infection, and uncommonly feeling faint from the procedure.
- **Blood Pressure:** Bruising and discomfort may occur from the constriction of the blood pressure cuff.
- **Ultrasound measures***:* The blood vessel ultrasound test uses an ultrasound machine which may cause heat or vibrational damage to the measured site. Ultrasound gel has also been noted to cause allergic reactions in rare instances.
- **Wound Complicated by Infection:** Infection at the site of the wound/ulcer is a requirement of this study. Immediate action may be needed at the discretion of the supervising physician. This may include use of antibiotics (oral or intravenous [IV]), hospitalization, and possibly surgery.
- **Antibiotic Selection:** Diabetic foot ulcer infection may be treated by an antibiotic. Initial antibiotic therapy to treat diabetic foot ulcer infection are determined by your treating provider and are based on clinical characteristics, your drug allergies or sensitivities, and suspected causative pathogen (i.e., bacteria). In this study, the identification of pathogenic bacteria using PCR and/or mNGS may result in no, additional, or different antibiotics being prescribed. The decision for antibiotic prescription(s) to treat the diabetic foot ulcer infection will be made by the treating provider.
- **Potential Side Effects from an Antibiotic:** The use of antibiotics to treat a diabetic foot ulcer infection is not without risk. Common (and usually mild) side effects of antibiotics include but are not limited to rash, dizziness, diarrhea, and allergic reaction. Less common side effects include *Clostridioides difficile* infection (also called C. difficile or C. diff) which can cause diarrhea that can lead to colon damage. Should you encounter any of these, please contact your treating physician as soon as possible.
- **Medical information** that may be uncomfortable such as disclosure of medical diagnoses, and substance(s) use, and past medical history.
- **Unforeseeable Risks**: There may be risks or side effects related to the study that are unknown at this time. Continuous monitoring of all participants will facilitate appropriate action in the event of an unforeseeable risk.

The researchers will try to minimize these risks by:

- To avoid extra blood tests we will use the results of blood tests you are having for your clinical care
- To avoid extra wound debridement tissue collection we will use a small portion of tissue from what is collected during your clinical care.
- The research team and staff at the University of Michigan Medical School, Michigan Comprehensive Wound Care Clinic and Domino Farms will closely monitor all your testing and procedures.
- The samples (wound tissue) we collect from you during the study will be stored with a unique code. This means your personal identifying information will not be stored with your samples or other data collected from your medical records.

Additionally, there may be a risk involving loss of confidentiality or privacy. For example, if individuals outside this study were to discover that you were a participant in this research, or if any collected identifiable genetic or health information were disclosed to unauthorized persons, there is a risk of discrimination by employers or insurance providers. The researchers have adopted privacy and confidentiality procedures to help prevent such disclosures. See Section 9 of this document for more information on how the study team will protect your confidentiality and privacy.

As with any research study, there may be additional risks that are unknown or unexpected.

Keep in mind, as well, that the committee (IRBMED) that reviews this study does not review risks associated with procedures that are conducted as part of your regular medical care and are not part of the research in section 4.1, above. Risks associated with your regular medical treatment should be discussed with your regular doctor.

5.2 What happens if I get hurt, become sick, or have other problems as a result of this research?

The study team has taken steps to minimize the risks of this study. Even so, you may still have problems or side effects, even when the researchers are careful to avoid them. Please tell the researchers listed in Section 10 about any injuries, side effects, or other problems that you have during this study. You should also tell your regular doctors**.**

The researchers have taken steps to minimize the risks of this study. Even so, you may still have problems or side effects, even when the researchers are careful to avoid them. Please tell the researchers listed in Section 10 about any injuries, side effects, or other problems that you have during this study. You should also tell your regular doctors or any other provider or hospital you visit**.**

5.3 If I take part in this study, can I also participate in other studies?

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.

5.4 How could I benefit if I take part in this study? How could others benefit?

You may gain knowledge of current health status as determined by medical history and physical examination as well as health benefits related to monitoring your diabetes. The benefit to society will include an improved understanding of the mechanisms of diabetes wound infection development and the treatment of diabetes and diabetic foot ulcers. Data from this study may also help determine an effective approach to prevent the progression of obesity and obesity-related diseases and inflammatory conditions.

5.5 Will the researchers tell me if they learn of new information that could change my willingness to stay in this study?

Yes, the researchers will tell you if they learn of important new information that may change your willingness to stay in this study. If new information is provided to you after you have joined the study, it is possible that you may be asked to sign a new consent form that includes the new information.

6. ALTERNATIVES TO PARTICIPATING IN THE STUDY

6.1 If I decide not to take part in this study, what other options do I have?

Participation in this study is completely voluntary and will not influence in any way the care you are currently receiving from UMHS. This research is not designed to diagnose, treat, or prevent any disease. Your alternative is to not take part in the research.

7. ENDING THE STUDY

7.1 If I want to stop participating in the study, what should I do?

You are free to leave the study at any time. If you leave the study before it is finished, there will be no penalty to you. You will not lose any benefits to which you may otherwise be entitled. If you choose to tell the researchers why you are leaving the study, your reasons for leaving may be kept as part of the study record. If you decide to leave the study before it is finished, please tell one of the persons listed in Section 10 "Contact Information".

7.2 Could there be any harm to me if I decide to leave the study before it is finished?

There is no known harm for leaving this study before it is finished. It is important to maintain close contact with your provider and to continue the prescribed antibiotic(s) treatment to ensure appropriate management of your diabetic foot ulcer infection.

Tell us if you are thinking about stopping or decide to stop. It is important to tell us if you are thinking about stopping so any risks can be evaluated by the researchers. We will also tell you how to stop safely and discuss what follow-up care and testing could be most helpful for you. If you decide to leave the study before it is finished, please tell one of the researchers listed in Section 10 "Contact Information" (below).

You are free to end your participation partially or completely in the study. An example of partially ending your participation would be to discontinue receiving study intervention, while still allowing continuation of study follow-up procedures.

Please note that any information collected before you withdraw will be kept and used to complete the research.

Please note that even if you withdraw consent for further follow-up or contacts, if the study doctor becomes aware of additional safety information this will be reported to the sponsor to comply with legal or regulatory requirements.

7.3 Could the researchers take me out of the study even if I want to continue to participate?

Yes. There are many reasons why the researchers may need to end your participation in the study. Some examples are:

- The researcher believes that it is not in your best interest to stay in the study.
- You become ineligible to participate.
- Your condition changes and you need treatment that is not allowed while you are taking part in the study.
- You do not follow instructions from the researchers.
- The study is suspended or canceled.

8. FINANCIAL INFORMATION

8.1 Who will pay for the costs of the study? Will I or my health plan be billed for any costs of the study?

The study will pay for research-related items or services that are provided only because you are in the study. If you are not sure what these are, see Section 4.1 above or ask the researchers for a list. If you get a bill you think is wrong, call the researcher's telephone number listed in Section 10.1.

You or your health plan will pay for all the things it would have paid for even if you were not in the study, like:

- 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.

If you do not have a health plan, or if you think your health plan may not cover these costs during the study, please talk to the researchers listed in Section 10 below or call your health plan's medical reviewer.

The study team has given you instructions about this research study. It is important that you follow these instructions carefully. If you get sick, have a medical complication, or are injured because of your participation in the study, call Dr. Schmidt immediately, at (734) 647-5871 or (734) 232-2253. The doctor will either treat you or send you to another doctor for treatment.

If you are injured or in the event of a medical emergency, dial 911 or visit your nearest Emergency Room. If you believe the study has made you sick or caused you injury, contact one of the people listed in section 10 of this document. If taking part in the study makes you sick or causes you injury, you or your insurance provider will be billed for all costs of treatment as the study does not provide compensation for sickness or injury caused by the study. It is possible that your insurance will not cover these costs.

By signing this form, you do not give up your right to seek payment if you are harmed because of participation in this study.

8.2 Will I be paid or given anything for taking part in this study?

You will not receive compensation for participation in this study.

8.3 Who could profit or financially benefit from the study results?

No person or organization has a financial interest in the outcome of this study.

Research can lead to new discoveries, such as new tests, drugs, or devices. Researchers, their organizations, and other entities, including companies, may potentially benefit from the use of the data or discoveries. You will not have rights to these discoveries or any proceeds from them.

9. CONFIDENTIALITY OF PARTICIPANT RECORDS AND AUTHORIZATION TO RELEASE YOUR PROTECTED HEALTH INFORMATION

The information below describes how the confidentiality of your research records will be protected in this study, and any sub-studies described in this document.

9.1 How will the researchers protect my information?

Your research information will be stored in a locked cabinet. The samples we collect from you will not include names, registration numbers, or other information that is likely to allow someone other than the researchers to link the information to you. All data will be kept in a locked file cabinet and converted to electronic data. All electronic data will be safe guarded by password protection.

If you tell us or we learn something that makes us believe that you or others have been or may be harmed, we may be required to report that information to the appropriate agencies.

This trial will be registered and report results on www.ClinicalTrials.gov, a publicly available registry of clinical trials.

9.2 What protected health information (PHI) about me could be seen by the researchers or by other people? Why? Who might see it?

Signing this form gives the researchers your permission to obtain, use, and share information about you for this study, and is required for you to take part in the study.

Medical information and billing records are protected by the privacy regulations of the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA). This type of information is called protected health information

(PHI). PHI about you may be obtained from any hospital, doctor, and other health care provider involved in your care, including:

- Hospital/doctor's office records, including test results (X-rays, blood tests, urine tests, etc.)
- All records relating to your condition, the treatment you have received, and your response to the treatment
- Demographic information
- Personal identifiers

There are many reasons why information about you may be used or seen by the researchers or others during or after this study. Examples include:

- The researchers may need the information to make sure you can take part in the study.
- The researchers may need the information to check your test results or look for side effects.
- University, Food and Drug Administration (FDA) and/or other government officials, auditors, and/or the IRB may need the information to make sure that the study is done in a safe and proper manner.
- Safety monitors or committees may need the information to:
    - Make sure the study is done safely and properly
    - Learn more about side effects
    - Analyze the results of the study
- Insurance companies or other organizations may need the information to pay your medical bills or other costs of your participation in the study.
- The researchers may need to use the information to create a databank of information about your condition or its treatment.
- Information about your study participation may be included in your regular UMHS medical record.
- Federal or State law may require the study team to give information to government agencies. For example, to prevent harm to you or others, or for public health reasons.

The results of this study could be published in an article or presented at a scientific meeting but would not include any information that would let others know who you are.

9.3 What happens to information about me after the study is over or if I cancel my permission to use my PHI?

As a rule, the researchers will not continue to use or disclose information about you but will keep it secure until it is destroyed. Sometimes, it may be necessary for information about you to continue to be used or disclosed, even after you have canceled your permission, or the study is over.

Examples of reasons for this include:

- To avoid losing study results that have already included your information
- To provide limited information for research, education, or other activities. (This information would not include your name, social security number, or anything else that could let others know who you are.)
- To help University and government officials make sure that the study was conducted properly

As long as your information is kept within the University of Michigan Health System, it is protected by the Health System's privacy policies. For more information about these policies, ask for a copy of the University of Michigan "Notice of Privacy Practices". This information is also available on the web at http://www.uofmhealth.org/patient+and+visitor+guide/hipaa. Note that once your information has been shared

with others as described under Question 9.2, it may no longer be protected by the privacy regulations of the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA).

9.4 When does my permission to use my PHI expire?

Your permission does not expire unless you cancel it. You may cancel your permission at any time by writing to the researchers listed in Section 10 "Contact Information" (below). If you withdraw your permission, you may no longer be eligible to participate in this study.

10. CONTACT INFORMATION

10.1 Who can I contact about this study?

Please contact the researchers listed below to:

- Obtain more information about the study
- Ask a question about the study procedures or treatments
- Talk about study-related costs to you or your health plan
- Report an illness, injury, or other problem (you may also need to tell your regular doctors)
- Leave the study before it is finished
- Express a concern about the study

Principal Investigator:	**Brian M. Schmidt, DPM**
Mailing Address:	24 Frank Lloyd Wright Drive Lobby C, Suite 1300 Ann Arbor, Michigan 48106-0451
Telephone:	(734) 647-5871 or (734) 232-2253
E-mail:	bmcs@med.umich.edu

You may also express a question or concern about a study by contacting the Institutional Review Board listed below:

University of Michigan Medical School Institutional Review Board (IRBMED)
2800 Plymouth Road, Building 520, Room 3214, Ann Arbor, MI 48109-2800
Telephone: 734-763-4768 (For International Studies, include the appropriate calling codes.)
Fax: 734-763-1234
e-mail: irbmed@umich.edu

If you are concerned about a possible violation of your privacy or concerned about a study, you may contact the University of Michigan Health System Compliance Help Line at 1-866-990-0111.

When you call or write about a concern, please provide as much information as possible, including the name of the researcher, the IRBMED number (at the top of this form), and details about the problem. This will help University officials to look into your concern. When reporting a concern, you do not have to give your name unless you want to.

11. RECORD OF INFORMATION PROVIDED

11.1 What documents will be given to me?

Your signature in the next section means that you have received a signed and dated copy of the "Consent to be Part of a Research Study" document. (*Note: In addition to the copy you receive, copies of this document will be stored in a separate confidential research file and may be entered into your regular University of Michigan medical record.).*

12. STORAGE, USE, AND SHARING OF SPECIMENS AND INFORMATION COLLECTED OR GENERATED IN THE STUDY DESCRIBED ABOVE

12.1 What is meant by the storage, future research use, and sharing of study participants' medical information and leftover samples (sometimes referred to as biospecimens) taken from me?

Individual researchers, the University of Michigan, and companies that design and sponsor studies often want to keep subjects' medical information and leftover samples such as blood, tissue, saliva, and cells to use in future research. These future research uses take different basic forms, which are described below. The medical information and leftover samples may also be shared with other researchers so that they can use it in their studies.

The purpose of storing, using, and sharing participants' medical information and leftover samples is to promote more research that might lead to useful medical discoveries.

In some cases, researchers need your consent to store, use, and share your medical information and leftover samples; in other cases, they can store, use and/or share it without your consent. Whether researchers need your consent depends on if the stored information and samples would still be identifiable as yours or whether the researchers would first remove all information connecting them back to you.

12.2 Types of storage, future research use, and sharing in this study

Investigator-initiated research

For purposes of this research study, your collected private information and any biospecimens will be shared with the study sponsor, National Institutes of Health (NIH) / National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), its collaborators, and associated research partners.

With appropriate institutional and regulatory permissions, your collected private information and identifiable biospecimens could be used for future research with other researchers and companies, including those in other countries, with or without your consent.

In addition, after identifiers are removed from your private information and any biospecimens, the information and biospecimens could be used for future research studies by U-M and shared with other researchers or companies, including those in other countries, without your additional informed consent.

In each of the situations described below, you may later change your mind and withdraw your consent to the storage, use, and sharing of your information even if you give consent now, provided that the information can still be identified as yours, has not already been used or shared, or has not been added to your medical record. Keep in mind, however, that any information that has already been used or shared with other researchers, as well as any information that has been added to your medical record, cannot be recovered, or deleted.

NIH data management and sharing (DMS) policy

This study receives funding from the National Institutes of Health (NIH). NIH requires us to develop a plan regarding how we may share some information about you with other researchers so that they can use it in their studies. Their research may be like this study or may be completely different. Once we have shared information about you with other researchers, we will not be able to get it back.

Although we will do our best to protect your information, both during storage and when sharing it with others, it's possible that unauthorized people might gain access to your information.

We will remove all details from your information that identify you individually and assign it a random code before sharing it with other researchers. Once we have removed and destroyed those identifying details, it will be impossible for others to know the information came from you.

Your information will be openly available to the public. Researchers who wish to access and use your information in their studies will not be required to obtain permission.

You will not find out the results or directly benefit from future research utilizing your information. Sharing your information may contribute to research that helps others in the future.

You do not have to agree to storage and sharing of your information if you do not wish to. You may take part in this study even if you do not want us to share your information with other researchers. You will indicate your choice regarding storage and sharing of your information in a signature box at near the end of this document.

13. SIGNATURES

Consent to Participate in the Research Study

I understand the information printed on this form. I have discussed this study, its risks and potential benefits, and my other choices with _____. My questions so far have been answered. I understand that if I have more questions or concerns about the study or my participation as a research subject, I may contact one of the people listed in Section 10 (above). I understand that I will receive a copy of this form at the time I sign it and later upon request. I understand that if my ability to consent or assent for myself changes, either I or my legal representative may be asked to re-consent prior to my continued participation in this study.

Print Legal Name: _____

Signature: _____

Date of Signature (mm/dd/yy): _____

Consent for photography solely for purposes of this research project

This study involves photography. If you do not agree to be recorded, you can still take part in the study.

_____ Yes, I agree to be photographed (signature required below).

_____ No, I do not agree to be photographed (no signature).

Print Legal Name: _____

Signature: _____

Date of Signature (mm/dd/yy): _____

Consent to Collect for Unspecified Future Research

This project involves the option to allow the study team to keep your identifiable specimens/data for use in future research. I understand that it is my choice whether to allow future use of my specimens. I understand that if my ability to consent or assent for myself changes, either I or my legal representative may be asked to re-consent prior to my continued participation in this study.

_____ Yes, I agree to let the study team keep my specimens for future research.

_____ No, I do not agree to let the study team keep my specimens for future research.

Print Legal Name: _____

Signature: _____

Date of Signature (mm/dd/yy): _____

Principal Investigator or Designee

I have provided this participant and/or his/her legally authorized representative(s) with information about this study that I believe to be accurate and complete. The participant and/or his/her legally authorized representative(s) indicated that he or she understands the nature of the study, including risks and benefits of participating.

Printed Legal Name: _____

Title: _____

Signature: _____

Date of Signature (mm/dd/yy): _____