If appropriate for this study, a scanned copy of the signed consent form should be uploaded to the participant's Epic/EMR record.

Patient I.D. plate

RESEARCH PARTICIPANT INFORMED CONSENT AND PRIVACY AUTHORIZATION FORM

Protocol Title: **Impacting the oral HPV continuum: MOUTH study (Men and women Offering Understanding of Throat HPV)**

Application No.: **IRB00119537**

Sponsor: **NIH/NIDCR**

Principal Investigator: **Amber D'Souza, PhD**
615 N Wolfe St. Rm. E6132
Baltimore, MD 21205
410-502-2583 (phone)
410-614-2632 (fax)

1. What you should know about this study:

- You are being asked to join a research study. This consent form explains the research study and your part in it. Please read it carefully and take as much time as you need. Ask your study doctor or the study team to explain any words or information that you do not understand.
- You are a volunteer. If you join the study, you can change your mind later. There will be no penalty or loss of benefits if you decide to quit the study.
- During the study, we will tell you if we learn any new information that might affect whether you wish to continue to participate.
- If we think your participation in this study may affect your clinical care, information about your study participation will be included in your medical record, which is used throughout Johns Hopkins. Doctors outside of Johns Hopkins may not have access to this information. You can ask the research team to send this information to any of your doctors.
- When Johns Hopkins is used in this consent form, it includes The Johns Hopkins University, The Johns Hopkins Hospital, Johns Hopkins Bayview Medical Center, Howard County General Hospital, Johns Hopkins Community Physicians, Suburban Hospital, Sibley Memorial Hospital and All Children's Hospital.
- Biospecimens will be collected in this study. Biospecimens may include any of the following: blood, tissue, saliva, urine, bone marrow, cells, etc. Most biospecimens contain DNA, which is the genetic code for each person.

2. Why is this research being done?

Human papillomavirus (HPV) is a sexually transmitted infection. HPV can cause anal, cervical, and throat (tonsil and back of tongue) cancers. Although HPV infection is common, most people clear the infections quickly. We do not yet know why some people have oral HPV infections that persist and progress and what factors affect the clearance rate of these infections.

This research is being done to:

- Explore the effects of certain risk factors for persistent oral HPV. These behavioral and biologic risk factors include tobacco use, sexual behavior history, microorganisms found in the mouth, and immune response
- Explore whether people who test positive for a HPV protein (HPV16 E6) are more likely to develop oral cancer
- Evaluate how cell counts (HIV and CD4) affect the persistence of oral HPV (only for those who have participated in previous studies called "MACS" or "WIHS").
- Understand the impact of participation in oral HPV/oropharyngeal cancer screening on participants of the MOUTH Study.

People 18 and older who are at a Johns Hopkins clinic for another purpose, or may hear about the study from a friend, family member, study staff, article or website, or are recruited at one of our community events, may join.

How many people will be in this study?

About 1325 people will be screened across several sites during this study. Those with oral HPV biomarkers identified (expected to be about 110 people from these sites) will have additional study follow-up.

3. What will happen if you join this study?

As part of this study, you will:

- Complete a risk behavior survey. The survey will ask about factors that may be related to oral HPV risk, including questions about private behaviors.
- Give the following samples (to be tested for HPV infection):
    - Oral rinse
    - Urine
    - Blood *optional
    - Saliva
- Some participants will complete a one-on-one or small group optional interview and mental health questionnaires at the end of the study. The interview will ask questions about the participant's thoughts about participating in oropharyngeal cancer screening. The mental health questionnaires will ask questions about how the participant is feeling and problems that may or may not bother the participant.

Table 1	*Year 1*	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Year 5+*
PHASE ONE: SCREENING May be completed remotely [1]	Visit 1					
	Oral Rinse, Saliva Blood, Urine Risk factor survey Medical Record Abstraction					Medical Record Abstraction
PHASE TWO: FOLLOW-UP May be completed remotely [1]		Visit 2	Visit 3	Visit 4	Visit 5	Cancer Registry Matching
		Risk factor survey Oral Rinse, Saliva Blood, Urine Head & Neck Exam Imaging Medical Record Abstraction	Risk factor survey Oral Rinse Blood Medical Record Abstraction	Risk factor survey Oral Rinse Blood Medical Record Abstraction	Risk factor survey Oral Rinse, Saliva Blood, Urine Head & Neck Exam Imaging Medical Record Abstraction Interview Screening Questionnaires	Registry Match Medical Record Abstraction

[1]Visits may be completed in person or by mail (whichever you prefer). If done by mail you will complete the internet survey we email you and you can self-collect the samples and mail back to us at no cost to you.

Participants with oral HPV DNA or antibodies identified in the first visit will have additional study follow-up, including:

- Have 4 more follow up visits (one each year for four years). Each visit will take about 30 minutes to complete. During these visits, you will be asked to complete risk factor surveys and provide samples (oral rinse, saliva, urine, and blood) depending on the study visit. Your samples will be tested for HPV infection.
- Study visits can be done by the mail or in person. We may be able be able to arrange for one blood sample to be collected from home.
- At 2 visits you will have the option of completing a head and neck exam and imaging (visit 2 and visit 5). If we find anything abnormal during the exam, these results will be given to you.
- Study team coordinators will abstract information from the medical record of each participant. We will collect the reason for clinical visit and any history or new diagnosis of pre-cancers or cancers.
- We will also check with cancer registries to see if you develop cancer.

<u>Test Results</u>

Participants will not receive the results of these experimental tests, because:

- There is no approved test by the Food and Drug Administration (FDA) for oral HPV infection
- The accuracy of the research tests used for this study is unknown
- There is no treatment for existing oral HPV infection
- We do not know how likely oral HPV infections are to persist or progress
- There are no clinical guidelines for treatment or monitoring individuals with oral HPV infection

<u>MRI</u>

Magnetic Resonance Imaging (MRI) scans create images of the body using a magnet and radio waves. While the procedure is much like a CT scan, there is no radiation involved in an MRI exam. The MRI exam(s) in this study will take about 30 minutes.

To be sure that it is safe for you to have an MRI exam, you will be asked to complete standard MRI screening questionnaires.

Since the MRI machine uses a strong magnet that will attract other metals, you may not take part in this study if you have a pacemaker, an implanted defibrillator, or certain other implanted electronic or metallic devices, shrapnel, or other metal.

If you have a history of metal in your head or eyes, you cannot take part in this study.

Although the MRI machine is open at both ends, you may still feel confined (claustrophobic). If this bothers you, please tell the MRI staff. The MRI machine periodically makes loud banging noises. We will provide earplugs or headphones for you to wear during the MRI exam.

During the exam, you will be able to hear the MRI staff. They will be able to see and hear you.

At some point during the MRI exam, the scanning procedure will be interrupted to give you a contrast agent through a needle in your arm.

Ultrasound
Ultrasound exams use sounds waves to produce images of the body. The ultrasound exam(s) in this study will take about 15 minutes to complete.

During the exam, a water based gel will be applied to your skin and an ultrasound probe (wand) is placed on the gel and moved over the head and neck area.

In this study, you may be offered MRI and/or Ultrasound imaging.

Incidental Findings
The MRI and Ultrasound you are having as part of this research study will be reviewed by a qualified person just as it would be if you were having the MRI and Ultrasound as part of your routine medical care.

There is a possibility that while reviewing your MRI and Ultrasound we may see an abnormality that we did not expect to see in this study. This is what is called an "incidental finding."

We will let you know if we see such an incidental finding. Depending on the type of incidental finding, we may contact you by mail or by phone. In the case of a potential serious emergency, someone may go to your home.

A qualified person (usually a member of the research team) will talk to you if there is an incidental finding. You do not have an option to decline information about an incidental finding.

If you want, we will give information about this incidental finding to your primary doctor or we will refer you to an appropriate doctor for further evaluation.

- An incidental finding may cause you to feel anxious.
- Since an incidental finding will be part of your medical record, it may affect your current or future life or health insurance coverage. This risk will vary depending on the type of insurance plan involved.

The costs for any care that will be needed to diagnose or treat an incidental finding would not be paid for by this research study. These costs would be your responsibility.

Audio recordings

As part of this research, we are requesting your permission to create and use audio recordings of the interview to help answer the research question. Any recordings will not be used for advertising or non-study related purposes.

You should know that:

- You may request that the audio recording be stopped at any time.
- If you agree to allow the audio recording and then change your mind, you may ask us to destroy that recording. If the recording has had all identifiers removed, we may not be able to do this.
- We will only use these audio recordings for the purposes of this research.
- The audio recording will be transcribed by an outside company that has agreed to keep all data confidential.

Please indicate your decision below by checking the appropriate statement:

YES ☐ I **agree** to allow the Principal Investigator and Johns Hopkins study team members to make and use audio recordings of me for the purpose of this study.

NO ☐ I **do not agree** to allow the Principal Investigator and Johns Hopkins study team members to make and use audio recordings of me for the purpose of this study.

_____ _____

Participant Signature Date

Request to collect and store biospecimens for future research

As part of this research study, we would like to ask you to let us store your biospecimens and health information for future research. This research could include other diseases.

The research may involve research tools such as gene sequencing or the creation of cell lines.

- Gene sequencing of your DNA provides researchers with the code to your genetic material.
- Cell lines are living tissue samples that can be grown in a laboratory. A cell line can provide an unlimited supply of cells in the future without requiring more samples from you. Each cell contains your complete DNA.

The Genetic Information Nondiscrimination Act (GINA) is a federal law that helps reduce the risk of discrimination by health insurers or employers based on your genetic information. GINA does not protect you from discrimination if you apply for other types of insurance (such as life, disability or long-term care). GINA also does not protect you against discrimination based on an already-diagnosed genetic condition or disease.

Genetic information is unique to you and your family. Even without your name or other identifiers, it may be possible to identify you or other members of your family with your genetic information. Your study site follows procedures so that people who work with your DNA information for research cannot discover it belongs to you, unless you have given consent. However, new techniques may be developed that in the future make it easier to link your genetic data to you, so we cannot promise that your genetic information will never be linked to you.

The study doctor can provide you with additional information if you have questions. Also, further information about our use of your biospecimens can be found in this consent document under the heading *What happens to Data and Biospecimens that are collected in the study?*

Will you allow us to store the biospecimens we collect for this study for use in future research*?*

YES ☐ _____
Signature of Participant

NO ☐ _____
Signature of Participant

Future Contact
We would like your permission to contact you about other studies that you may be eligible for in the future.

Please sign and date your choice below:

YES ☐ _____ _____
Signature of Participant Date

NO ☐ _____ _____
Signature of Participant Date

Reporting Requirements
The research team will comply with Maryland law and will tell the local or state authorities if they suspect abuse or neglect of a child or dependent adult.

How long will you be in the study?
Depending on the results, you may only be in this study for one visit, or you may be in this study for up to 5 years.

4. What are the risks or discomforts of the study?

MRI:
While no significant risks have been found from the use of MRI scans, you may be bothered by the MRI machine noise and by feelings of being closed in (claustrophobia).

The contrast agent you will receive is FDA-approved and used routinely for MRI exams. It contains a material called gadolinium.

- About 1 in 100 people may notice discomfort, tingling or warmth in the lips, metallic taste in the mouth, tingling in the arm, nausea, or headache. These symptoms go away quickly.
- There is a small risk of an allergic reaction to gadolinium. However, a severe allergic reaction occurs in less than one in 300,000 people.
- The placement of the needle (small plastic tube) to give you the gadolinium may cause minor pain, bruising and/or infection at the injection site.

People with severe kidney failure who receive gadolinium are at risk of developing Nephrogenic Systemic Fibrosis/Nephrogenic Fibrosing Dermopathy (NSF/NFD). This disease causes fibrosis (the formation of too much connective tissue in the skin and internal organs). This is a serious disease, which can result in death.

You should notify the study team or MRI staff if:
- you are allergic to gadolinium
- you have kidney problems

Studies have shown that gadolinium contrast agents may accumulate in various parts of your body, including bone, brain, and other organs. The amount accumulated increases with the number of times gadolinium is administered. There is no evidence currently that this is associated with any adverse health effects.

If you have any concerns, you should discuss with your doctor the benefits and risks of receiving gadolinium contrast agent.

Blood draw:
Blood draw may cause some participants to feel discomfort, dizziness, or even faint when their blood is drawn. Redness, pain, swelling, bruising, or rarely an infection may occur where the blood is taken. To minimize these risks, trained phlebotomists will do the blood draws following universal precautions.

Surveys:
Some of the questions on the study surveys are sensitive and you might be embarrassed to answer them. To minimize that discomfort, the surveys will be completed privately on study iPads or computers. You may get tired or bored while completing the survey. You do not have to answer any question you do not want to answer.

Interviews:
Participating in the qualitative interview may make some participants feel uncomfortable. To minimize this discomfort, the interviews will be completed in a private location by trained study staff. You are not required to answer any questions which may make you feel uncomfortable. All physical study materials such as the informed consent, study iPads used for note-taking, and the recording device tape containing recorded interviews will be stored in a locked filing cabinet at the study site.

We will begin the group interview by asking the participants to agree to the importance of keeping information discussed in the group interview confidential. In addition, we will ask each participant to verbally agree to keep everything discussed in the room confidential, and will remind them at the end of the group not to discuss the material outside.

Mental Health Questionnaires:
Questions on the mental health questionnaires may make some participants feel uncomfortable. To minimize that discomfort, the questionnaires can be completed privately on study iPads or computers. You do not have to answer any question you do not want to answer.

Loss of confidentiality:
There is a risk that information about you may become known to people outside of this study. All records related to your involvement in this research study will be stored in a locked file cabinet or on a password-protected computer. All of your samples will be labeled with your study ID, rather than by your name, and the information linking your study identification number with your identity will be kept separate from the research records. Under certain conditions, people responsible for making sure that research is done properly may review your study records. This could include research or medical staff, representatives of the National Institutes of Health, and the Food and Drug Administration. All of these people are also required to keep your identity confidential. Otherwise, any information that identifies you will not be made available to persons not working on the study without your permission.

5. Are there risks related to pregnancy?

MRI imaging is not known to cause risk to the developing fetus. However, there may be risks that are not known at this time. MRI contrast is known to cross the placenta and subsequent risks to the developing fetus are not known. You may have an MRI scan without contrast if the study allows this. If possible, you should wait until after your pregnancy is completed before having contrast-enhanced MRI imaging.

6. Are there benefits to being in the study?

If you have a head and neck examination or imaging that detects an abnormality, this may be of benefit to you. There are no other direct benefits to you from being in this study. If you take part in this study, you may help others in the future. This research may give insight to physicians and researchers on the risks and benefits of oropharyngeal cancer screening and use of HPV biomarkers.

7. What are your options if you do not want to be in the study?

You do not have to join this study. If you do not join, your care at Johns Hopkins will not be affected.

8. Will it cost you anything to be in this study?

No.

You will receive a separate Insurance and Research Participant Financial Responsibility Information Sheet (Sheet).

This Sheet will give you the following information:

- The procedures, tests, drugs or devices that are part of this research and that will be paid for by the study (no cost to you).
- The procedures, tests, drugs or devices that will be billed to you and/or your health insurer. If you have health insurance, you will be responsible for any co-pays or deductibles not covered by your insurance.

9. Will you be paid if you join this study?

You will receive $15 at the first study visit, $25 at each of the follow-up study visits, $25 for each of the completed imaging exam visits, and $25 for completion of the qualitative interview and screeners in the form of a gift card or check. You may also receive a parking voucher.

You may be required to provide your social security number to be paid for taking part in this study. Federal tax law requires that you report your research payments when you file your taxes. If your total payments from Johns Hopkins exceed $600 per year, Johns Hopkins will report these payments to the Internal Revenue Service and you will receive a 1099-MISC form from us.

10. Can you leave the study early?

- You can agree to be in the study now and change your mind later.
- If you wish to stop, please tell us right away.
- Leaving this study early will not stop you from getting regular medical care.

If you leave the study early, Johns Hopkins may use or give out your health information that it has already collected if the information is needed for this study or any follow-up activities**.**

11. Why might we take you out of the study early?

You may be taken out of the study if:

- Staying in the study would be harmful.
- You fail to follow instructions.
- The study is cancelled.
- There may be other reasons to take you out of the study that we do not know at this time.

If you are taken out of the study early, Johns Hopkins may use or give out your health information that it has already collected if the information is needed for this study or any follow-up activities**.**

12. How will your privacy be protected?

We have rules to protect information about you. Federal and state laws and the federal medical Privacy Rule also protect your privacy. By signing this form you provide your permission, called your "authorization," for the use and disclosure of information protected by the Privacy Rule.

The research team working on the study will collect information about you. This includes things learned from the procedures described in this consent form. They may also collect other information including your name, address, date of birth, and information from your medical records (which may include information about HIV status, drug, alcohol or STI treatment, genetic test results, or mental health treatment).

The research team who may be a part of Johns Hopkins Health System, Johns Hopkins University or the Johns Hopkins Applied Physics Laboratory will know your identity and that you are in the research study. Other people at Johns Hopkins, including your doctors, may also see or give out your information. We make this information available to your doctors for your safety.

People outside of Johns Hopkins may need to see or receive your information for this study. Examples include government agencies (such as the Food and Drug Administration), safety monitors, other sites in the study and companies that sponsor the study.

We cannot do this study without your authorization to use and give out your information. You do not have to give us this authorization. If you do not, then you may not join this study.

We will use and disclose your information only as described in this form and in our Notice of Privacy Practices; however, people outside Johns Hopkins who receive your information may not be covered by this promise or by the federal Privacy Rule. We try to make sure that everyone who needs to see your information keeps it confidential – but we cannot guarantee that your information will not be re-disclosed.

The use and disclosure of your information has no time limit. You may revoke (cancel) your permission to use and disclose your information at any time by notifying the Principal Investigator of this study by phone or in writing. If you contact the Principal Investigator by phone, you must follow-up with a written request that includes the study number and your contact information. The Principal Investigator's name, address, phone and fax information are on page one of this consent form.

If you do cancel your authorization to use and disclose your information, your part in this study will end and no further information about you will be collected. Your revocation (cancellation) would not affect information already collected in the study, or information we disclosed before you wrote to the Principal Investigator to cancel your authorization.

13. Will the study require any of your other health care providers to share your health information with the researchers of this study?

As a part of this study, the researchers may ask to see your health care records from your other health care providers.

14. What if there is a Certificate of Confidentiality for this study?

Your study information is protected by a Certificate of Confidentiality. This Certificate allows us, in some cases, to refuse to give out your information even if requested using legal means.

It does not protect information that we have to report by law, such as child abuse or some infectious diseases. The Certificate does not prevent us from disclosing your information if we learn of possible harm to yourself or others, or if you need medical help.

Disclosures that you consent to in this document are not protected. This includes putting research data in the medical record or sharing research data for this study or future research. Disclosures that you make yourself are also not protected.

15. What other things should you know about this research study?

a. What is the Institutional Review Board (IRB) and how does it protect you?

The Johns Hopkins Medicine IRB is made up of:

- Doctors
- Nurses
- Ethicists
- Non-scientists
- and people from the local community.

The IRB reviews human research studies. It protects the rights and welfare of the people taking part in those studies. You may contact the IRB if you have questions about your rights as a participant or if you think you have not been treated fairly. The IRB office number is 410-955-3008. You may also call this number for other questions, concerns or complaints about the research.

When the Johns Hopkins School of Medicine Institutional Review Board (IRB) reviews a study at another site, that site (institution) is solely responsible for the safe conduct of the study and for following the protocol approved by the Johns Hopkins IRB.

b. What do you do if you have questions about the study?

Call the principal investigator, Dr. Amber D'Souza, PhD at 410-502-2583. If you wish, you may contact the principal investigator by letter or by fax. The address and fax number are on page one of this consent form. If you cannot reach the principal investigator or wish to talk to someone else, call the IRB office at 410-955-3008.

If you are taking part at Suburban Hospital, call Dr. Mydlarz at 301-896-3332.

c. What happens to Data and Biospecimens that are collected in the study?

Johns Hopkins and our research partners work to understand and cure diseases. The biospecimens and/or data you provide are important to this effort.

If you join this study, you should understand that you will not own your biospecimens or data, and should researchers use them to create a new product or idea, you will not benefit financially.

With appropriate protections for privacy, Johns Hopkins may share your biospecimens and information with our research sponsors and partners.

16. What is Genomic Data Sharing?

Genomic studies, including genome-wide association studies (GWAS), examine genetic differences in the entire human genome (the complete set of human genes) and the association between these genetic differences and health conditions.

As part of this study, we may collect information about your health and your individual genes.

This information may be sent to a National Institutes of Health (NIH) designated data repository that includes all kinds of genomic data from studies funded by the NIH.

The aim of collecting this information is to look for genetic connections that:

- may increase the likelihood of getting a certain disease (such as asthma, cancer, diabetes, heart disease or mental illness) or a condition (such as high blood pressure or obesity)
- may affect the progress of a certain disease or condition
- may affect treatments (medicines, etc.) that work for certain diseases in some people, but not in others.

We will remove direct identifiers (such as your name) and instead code your information before sending it to the repository**.** NIH will never get this code or the identifiers we have removed.

The repository is a controlled-access repository. Controlled-access data is only available to researchers and companies who apply to the NIH. The NIH will review data requests for scientific merit and for methods to protect data and methods to ensure data will be used for the approved purpose. We will not know what types of health-related research will be done with the data that are sent to the repository.

What are the risks to your privacy?

There may be risks to your privacy and the privacy of your relatives from storing your information in the repository. Although the NIH takes measures to protect privacy, we do not know how likely it is that your identity could become re-connected with your genetic and health information.

If your genetic information were re-identified, personal information about you, your health and your risk of disease could become known to others. This could present unknown risks. Current federal law will help protect you from genetic discrimination in health insurance and employment.

Are there benefits to sharing your genetic information?

There is no direct benefit to you from placing your genetic information in the repository. Allowing researchers to study your genetic information may lead to a better understanding of how genes affect health. This may help other people in the future.

17. What does your signature on this consent form mean?

Your signature on this form means that: You understand the information given to you in this form, you accept the provisions in the form and you agree to join the study. You will not give up any legal rights by signing this consent form.

WE WILL GIVE YOU A COPY OF THIS SIGNED AND DATED CONSENT FORM

Signature of Participant	(Print Name)	Date/Time

Signature of Person Obtaining Consent	(Print Name)	Date/Time

I have received the separate Insurance and Research Participant Financial Responsibility Information Sheet.

Signature of Participant, LAR or Parent/Guardian	(Print Name)	Date/Time

NOTE: A COPY OF THE SIGNED, DATED CONSENT FORM MUST BE KEPT BY THE PRINCIPAL INVESTIGATOR AND A COPY MUST BE GIVEN TO THE PARTICIPANT. IF APPROPRIATE FOR THIS STUDY, A SCANNED COPY OF THE SIGNED CONSENT FORM SHOULD BE UPLOADED TO THE PARTICIPANT'S EPIC/EMR RECORD (UNLESS NO MEDICAL RECORD EXISTS OR WILL BE CREATED).