Document Coversheet

Study Title: Estradiol Effects on Behavioral and Reward Sensitivity to Alcohol Across the Menstrual Cycle

Institution/Site:	University of Kentucky
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IRB2

KEY INFORMATION FOR ESTROGEN EFFECTS ON BEHAVIORAL AND REWARD SENSITIVITY TO ALCOHOL ACROSS THE MENSTRUAL CYCLE:

We are asking you to choose whether or not to volunteer for a research study about the effects of estrogen on alcohol and women's behavior. This page is to give you key information to help you decide whether to participate. We have included detailed information after this page. Ask the research team questions. If you have questions later, the contact information for the research investigator in charge of the study is below.

WHAT IS THE STUDY ABOUT AND HOW LONG WILL IT LAST?

You are invited to participate in a research study that tests how alcohol consumption in women can be affected by hormone levels over the menstrual cycle. You will first attend a session at the University of Kentucky to complete questionnaires about your health and drinking behavior so that we can determine if you are eligible to participate in the study. If eligible, you will provide saliva samples at home each morning to assess your hormone levels and complete an online self-report on how much alcohol you've been drinking recently. You will do this for 35 consecutive days. Over this 35-day period, you will also come to the University of Kentucky for two laboratory visits to test how an alcoholic drink affects your behavior and how you feel.

WHAT ARE KEY REASONS YOU MIGHT CHOOSE TO VOLUNTEER FOR THIS STUDY?

You are being invited to take part in this research study because you are a woman, ages 21-35 years, who drinks at least twice weekly, who is naturally cycling and not currently taking hormones, who is in good physical health, and has no problems concerning the consumption of alcoholic beverages. If you volunteer to take part in this study, you will be one of 100 people involved in the study at the University of Kentucky.

WHAT ARE KEY REASONS YOU MIGHT CHOOSE NOT TO VOLUNTEER FOR THIS STUDY?

You should not participate in this study if you use hormone-based medications, have known hormonal abnormalities, have irregular menstrual cycles, if you do not drink alcohol, if you are pregnant, if you do not weigh between 100-210 lbs, if you are under 21 years of age or are over 35 years of age, if you have a drinking problem or a drug use problem, a psychiatric disorder (schizophrenia, bipolar disorder, etc), or a medical condition in which drinking alcohol could be harmful to you.

DO YOU HAVE TO TAKE PART IN THE STUDY?

If you decide to take part in the study, it should be because you really want to volunteer. You will not lose any services, benefits, or rights you would normally have if you choose not to volunteer. If you decide to take part in the study, you still have the right to decide, at any time, that you no longer want to continue. No one will think badly of you or treat you differently if you decide not to take part in this study. There are no risks to you if you decide to end the study early. However, if you have received alcohol during one of the laboratory visits and then decide you no longer wish to continue, you will be required to remain in the laboratory until your blood alcohol falls to a safe level (0.02%) and the research staff judges you safe to leave. Treatment referrals may also be offered at this time and will include psychological services such as The Harris Center at 859-257-6853.

WHAT IF YOU HAVE QUESTIONS, SUGGESTIONS OR CONCERNS?

Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions, suggestions, concerns, or complaints about the study, you can contact either of the two principal investigators, Mark Fillmore, Ph.D. of the University of Kentucky, Department of Psychology, at 859-257-4728 or Michelle Martel, Ph.D. of the University of Kentucky, Department of Psychology, at 859-257-8662. If you have any questions, suggestions or concerns about your rights as a volunteer in this research, contact staff in the University of Kentucky (UK) Office of Research Integrity (ORI) between the business hours of 8am and 5pm EST, Monday-Friday at 859-257-9428 or toll free at 1-866-400-9428.

DETAILED CONSENT:

ARE THERE REASONS WHY YOU WOULD NOT QUALIFY FOR THIS STUDY?

You will be excluded from participation in this study if you have a drinking or a drug use problem, psychiatric disorder, or a medical condition in which drinking alcohol could be harmful to you. You will also be excluded if you do not drink alcohol, if you do not weigh between 100-210 lbs, if you arrive at the lab with a non-zero blood alcohol level or test urine-positive for other psychoactive drugs, or if you are under 21 years of age or are over 35 years of age. You will also be excluded due to use of hormone-based medications (e.g., hormone-based birth control or steroids), known hormonal abnormalities, irregular menstrual cycles (i.e., varying by more than 10 days between cycles; any cycle less than 25 days or over 35 days in length, as indicated by self-report of cycle length over past 3 months), current pregnancy or breastfeeding, visual or motor coordination problems, neurological disorders, pervasive developmental disorder, frank psychosis, or diagnosed intellectual disability.

WHERE WILL THE STUDY TAKE PLACE AND WHAT IS THE TOTAL AMOUNT OF TIME INVOLVED?

The research procedures will be conducted at the Department of Psychology (Waller Ave and Kastle Hall) at the University of Kentucky. The study involves 35 days of daily at-home data collection. During this period, you will also be required to attend 1 orientation session and 2 laboratory visits at the Alcohol Abuse Research facility in Kastle Hall. Your first lab visit is the diagnostic visit and will not involve any administration of alcohol. This session requires 3 hours to complete. The 2 laboratory test sessions that will test how alcohol affects you, will last about 7 hours, or until your blood alcohol level falls to a 0.02%. At the study's conclusion, you will return all materials to Waller Avenue and collect your payment there.

WHAT WILL YOU BE ASKED TO DO?

During the initial visit to the laboratory, we will interview you and have you fill out questionnaires that ask about your medical and psychiatric history and about your body size (weight, height). We will also ask about your recent alcohol drinking using interviews and questionnaires. During the visit, you will also receive a demonstration on saliva sample collection for the daily hormone tests. You will receive a take-home packet of testing supplies and instructions about how to collect your spit and urine samples and how to enter your results online to our secure website. We will give you a telephone number of a research assistant in case you have any questions. You will provide us multiple ways to contact you (phone, text, email) so that we can send you reminders to perform the daily saliva and urine tests and enter the results online. This initial visit will take place within 7 days before the start of your menstrual cycle.

For the 35 days of daily data collection, starting on the day after the start of your menstrual cycle, you will provide saliva samples taken at home each morning approximately thirty minutes after waking and then store samples in your home freezer. During days 10-25, after the start of your period, you will take urinary ovulation tests each morning and submit the results. Every evening before you go to bed and every morning when you wake up, you are instructed to log onto a secure website to complete a brief set of questions about your alcohol intake and alcohol craving. You will receive daily reminders to report your results and will be texted if you miss more than 2 consecutive days of reporting to us. At the end of the 35 days, study staff will contact you and arrange for a time for you to return your saliva samples, as well as receive your payment.

You will also attend the two laboratory test sessions that measure how alcohol affects you. One of these tests will be scheduled early in your menstrual cycle, around day 5 of your cycle (i.e., 5 days after the start of your period). The other laboratory test will be scheduled later in your cycle, approximately on day 12 after the start of your period when it is expected that you will be ovulating. In order to confirm that you are ovulating, you will complete urine ovulation tests.

During the laboratory tests, you will receive a drink of alcohol. The amount of alcohol will be 0.60 g/kg absolute alcohol that produces a peak blood-alcohol level of 0.08%. The alcohol is mixed with a carbonated, non-caffeinated, lemon flavored soda and is consumed within 10 minutes. The alcohol effects measured include simple behavioral responses, such as your reaction time, and questionnaires about how the alcohol is making you feel. You will receive one drink and then complete these tests. You then receive another drink and repeat the tests. We will measure how alcohol is making you feel by questionnaire ratings. A breathalyzer will measure your blood alcohol levels during these sessions. After testing is complete, you will relax in a recreational setting in the

laboratory until your blood alcohol level falls to 0.02%. You are also provided with a meal at this time. These laboratory sessions will start between 11:00 am and 6:00 pm. You will be required to not eat any food for four hours and to not use any drugs prior to these test sessions.

WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS?

Participation in this study involves no risks beyond those associated with moderate alcohol intoxication (i.e., a little sleepiness at the end of the session). Given the alcohol doses used in this study, it is a very rare occurrence that an individual will experience either nausea or vomiting. In addition to the risks listed, you may experience a previously unknown risk or side effect.

WILL YOU BENEFIT FROM TAKING PART IN THIS STUDY?

You will not get any personal benefit from taking part in this study. However, you will receive educational materials about the general behavioral effects of alcohol that can help guide your choices with respect to responsible drinking. In addition, you will have a better understanding of behavioral science research and knowledge about how such research is conducted.

IF YOU DON'T WANT TO TAKE PART IN THE STUDY, ARE THERE OTHER CHOICES?

If you do not want to be in the study, there are no other choices except not to take part in the study.

WHAT WILL IT COST YOU TO PARTICIPATE?

Participation in this study involves no financial costs to you or your third-party insurance provider.

WHO WILL SEE THE INFORMATION THAT YOU GIVE?

When we write about or share the results from the study, we will write about the combined information. We will keep your name and other identifying information private. Every effort will be made to maintain the confidentiality of your study records. All data will be coded by participant number only and any personal identifiers linking participants to their reports on questionnaires will be detached and destroyed as soon as participation is completed or disqualification occurs. Data is transferred via a secure website that time- and date-stamps data so accuracy of data collection can be monitored. Data from experimental sessions will be collected using a computerized data collection and management system. All data are stored in a unique file on the hard-drive of the computer and are electronically backed-up at the end of each session. In all instances, the data files do not contain the name of the subject; but instead, each subject is identified by a unique four-digit number. The computer file linking subject names and numbers will be encrypted and only investigators will have access. The data from the study may be published, however, you will not be identified by name. Your identity will remain confidential, unless you give prior written approval. We will make every effort to prevent anyone who is not on the research team from knowing that you gave us information, or what that information is. Your name, address and social security number will be listed on the receipt for payment that you receive, as required by the Internal Revenue Service; but no information about your participation in this research project will be released. Also, because this research is regulated by the National Institute of Health (NIH) and The University of Kentucky, staff from these and other DHHS agencies may look at or copy pertinent portions of records that identify you. However, it is the policy of these agencies and of these investigators that every attempt will be made to resist demands to release information that identifies you. When results of this study are published, your name will not be used. We will make every effort to safeguard your data, but as with anything online, we cannot guarantee the security of data obtained by way of the Internet. Third-party applications used in this study may have Terms of Service and Privacy policies outside of the control of the University of Kentucky.

Data from this study will be submitted to the National Institute of Mental Health Data Archive (NDA) at the National Institutes of Health (NIH). NDA is a large database where deidentified study data from many National Institute of Mental Health (NIMH) studies is stored and managed. Deidentified study data means that all personal information about you (such as name, address, birthdate and phone number) is removed and replaced with a code number. Sharing your deidentified study data helps researchers learn new and important things about mental health and substance use more quickly than before.

During and after the study, the study researchers will send deidentified study data about your health and behavior to the NDA. Other researchers across the world can then request your deidentified study data for other research. Every researcher (and institutions to which they belong) who requests your deidentified study data must promise to keep your data safe and promise not to try to learn your identity. Experts at the NIH who know how to keep your data safe will review each request carefully to reduce risks to your privacy. Sharing your study data does have some risks, although these risks are rare. Your study data could be accidentally shared with an unauthorized person who may attempt to learn your identity. The study researchers will make every attempt to protect your identity.

You may not benefit directly from allowing your study data to be shared with NDA. The study data provided to NDA may help researchers around the world learn more about mental health and substance use and how to help others who have problems with mental health and substance use. NIMH will also report to Congress and on its website about the different studies using NDA data. You will not be contacted directly about the study data you contributed to NDA.

You may decide now or later that you do not want your study data to be added to the NDA. You can still participate in this research study even if you decide that you do not want your data to be added to the NDA. If you know now that you do not want your data in the NDA, please tell the study researcher before leaving the clinic today. If you decide any time after today that you do not want your data to be added to the NDA, call or email the study staff who conducted this study, and they will tell NDA to stop sharing your study data. Once your data is part of the NDA, the study researchers cannot take back the study data that was shared before they were notified that you changed your mind. If you would like more information about NDA, this is available on-line at http://nda.nih.gov.

Certificates of Confidentiality (CoC):

This research will be covered by a Certificate of Confidentiality from the National Institutes of Health. The researchers with this Certificate may not disclose or use information, documents, or specimens that may identify you in any federal, state, or local civil, criminal, administrative, legislative, or other action, suit, or proceeding, or be used as evidence, for example, if there is a court subpoena, unless you have consented for this use. Information, documents, or specimens protected by this Certificate cannot be disclosed to anyone else who is not connected with the research except, if there is a federal, state, or local law that requires disclosure (such as to report child abuse or communicable diseases but not for federal, state, or local civil, criminal, administrative, legislative, or other proceedings); if you have consented to the disclosure, including for your medical treatment; or if it is used for other scientific research, as allowed by federal regulations protecting research subjects.

The Certificate cannot be used to refuse a request for information from personnel of the United States federal or state government agency sponsoring the project that is needed for auditing or program evaluation by NIH, which is funding this project. You should understand that a Certificate of Confidentiality does not prevent you from voluntarily releasing information about yourself or your involvement in this research. If you want your research information released to an insurer, medical care provider, or any other person not connected with the research, you must provide consent to allow the researchers to release it.

CAN YOU CHOOSE TO WITHDRAW FROM THE STUDY EARLY?

You can choose to leave the study at any time. You will not be treated differently if you decide to stop taking part in the study. If you choose to leave the study early, data collected until that point will remain in the study database and may not be removed.

The investigators conducting the study may need to remove you from the study. You may be removed from the study if:

- you are not able to follow the directions,
- we find that your participation in the study is more risk than benefit to you, or
- the agency paying for the study chooses to stop the study early for a number of scientific reasons.

There are no risks to you if you decide to end the study early. However, if you have already consumed your dose of alcohol, you will still have to wait in our laboratory until your blood alcohol concentration (BAC) has decreased to 0.02% and the research staff judges you safe to leave. Transportation home will be provided as needed.

ARE YOU PARTICIPATING, OR CAN YOU PARTICIPATE, IN ANOTHER RESEARCH STUDY AT THE SAME TIME AS PARTICIPATING IN THIS ONE?

You may take part in this study if you are currently involved in another research study. It is important to let the investigator/your doctor know if you are in another research study. You should discuss this with the investigator/your doctor before you agree to participate in another research study while you are in this study.

WHAT HAPPENS IF YOU GET HURT OR SICK DURING THE STUDY?

If you believe you are hurt or if you get sick because of something that is due to the study, you should call Lon Hays, M.D. at 859-323-6021 immediately. Lon Hays, M.D. will determine what type of treatment, if any, that is best for you at that time. If it is an emergency, you should contact the 24-hour on call physician by calling 859-226-7063 or paging 859-330-2216.

It is important for you to understand that the University of Kentucky does not have funds set aside to pay for the cost of any care or treatment that might be necessary because you get hurt or sick while taking part in this study. Also, the University of Kentucky will not pay for any wages you may lose if you are harmed by this study.

Medical costs related to your care and treatment because of study-related harm will be your responsibility. You do not give up your legal rights by signing this form.

WILL YOU RECEIVE ANY REWARDS FOR TAKING PART IN THIS STUDY?

You will be paid $340 for complete data collection which includes $70 for each of the two laboratory testing sessions and $200 for completing the daily reports and sample collections over the 35-day period. You are required to fill out a morning and evening online survey every day. It is very important to have a complete data set. If you miss a survey, $5 will be deducted from the total amount earned. If you do not complete the study either because you were excluded from participation or because you chose to terminate the procedure, you will receive payment for sessions completed. Payment will be provided in the form of a check. Record of the payment will be recorded for income tax purposes.

With a few exceptions, study payments are considered taxable income reportable to the Internal Review Service (IRS). A form 1099 will be sent to you if your total payments for research participation are $600 or more in a calendar year.

WHAT IF NEW INFORMATION IS LEARNED DURING THE STUDY THAT MIGHT AFFECT YOUR DECISION TO PARTICIPATE?

We will tell you if we learn new information that could change your mind about staying in the study. We may ask you to sign a new consent form if the information is provided to you after you have joined the study.

WILL YOU BE GIVEN INDIVIDUAL RESULTS FROM THE RESEARCH TESTS?

Generally, tests done for research purposes are not meant to provide clinical information. There is a slight possibility that during a research project, an investigator could discover something that could affect the health of you or your family. If this occurs, the finding will be reviewed by Lon Hays, M.D. to determine if it is in your best interest to contact you. If so, Mark Fillmore, Ph.D. will contact you using the information you provided. With the help of Lon Hays, M.D., they will present possible risks or benefits of receiving the information. At that time, you can choose to receive or refuse the result or finding. If you would like more information about this, call Mark Fillmore, Ph.D. at 859-257-4728.

WILL WE CONTACT YOU WITH INFORMATION ABOUT PARTICIPATING IN FUTURE STUDIES?

The research staff would like to contact you in the future with information about participating in additional studies. If so, it will be limited to 5 times per year.

Do you give your permission to be contacted in the future by the lab of Mark Fillmore, Ph.D. regarding your willingness to participate in future research studies?

☐ **Yes** ☐ **No** **Initials**_____

WHAT ELSE DO YOU NEED TO KNOW?

If you volunteer to take part in this study, you will be one of about 240 people to do so at the University of Kentucky. NIH is providing financial support and/or material for this study. A description of this clinical trial will be available on ClinicalTrials.gov as required by U.S. Law. This website will not include information that can identify you. At most, the website will include a summary of the results. You can search this website at any time.

WILL YOUR INFORMATION (OR SPECIMEN SAMPLES) BE USED FOR FUTURE RESEARCH?

Your information or samples collected for this study will not be used or shared for future research studies, even if we remove the identifiable information like your name, medical record number, or date of birth.

INFORMED CONSENT SIGNATURES

This consent includes the following:

- **Key Information Page**
- **Detailed Consent**

You will receive a copy of this consent form after it has been signed.

_____ **Signature of research subject**	_____ **Date**
_____ **Printed name of research subject**	
_____ Printed name of [authorized] person obtaining informed consent	_____ Date
_____ Signature of Principal Investigator or Sub/Co-Investigator	

PROTOCOL TYPE (VERSION 4)

IRB Approval
11/26/2024
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IMPORTANT NOTE: You will not be able to change your selections for "Which IRB" and "Protocol Process Type" after having created your application. If you selected the wrong IRB or Protocol Process Type, you may need to create a new application. Please contact the Office of Research Integrity (ORI) at 859-257-9428, IRBsubmission@uky.edu, or request a consult to resolve any questions regarding your selections.

For guidance, see:

- Which IRB?
- Which Protocol Process Type?
- "Getting Started"

Which IRB

(•) Medical ( ) NonMedical

Protocol Process Type

( ) Exemption
( ) Expedited (Must be risk level 1)
(•) Full

The revised Common Rule expanded exemption certification category 4 for certain secondary research with identifiable information or biospecimens. The regulations no longer require the information or biospecimens to be existing. For more information see the Exemption Categories Tool.

CONTINUATION REVIEW/FINAL REVIEW

2 unresolved comment(s)

In accordance with federal regulations and/or local policies, the IRB conducts periodic review of all currently approved projects. If you need your IRB approval to continue and you do not complete and submit the required materials in a timely manner, IRB approval will expire at the end of your current approval period.

If you have any questions, please contact the Office of Research Integrity at 859-257-9428 or email IRBsubmission@uky.edu.

To initiate your continuation review (CR)/annual administrative review (AAR), or properly close your study, complete this section and update/correct all other sections of your IRB application as applicable.
*****IMPORTANT*** Before leaving this page to update other sections of your application, be sure to SAVE this section first.**

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1. Status of the Research

Check the statement(s) that best describe(s) the current status of your research:

- ☐ No subjects have enrolled to date.
- ☑ Recruitment and/or enrollment of new subjects or review of records/specimens continue.
- ☐ Study is closed to enrollment, but subjects still receive research-related interventions (e.g., treatment, blood draws).
- ☐ Study enrollment is permanently closed; subjects have completed all research-related interventions; and the study remains active only for long-term follow-up of subjects (see Tool Tip above for info on long-term follow-up of subjects).*
- ☐ Research has progressed to the point that it involves 1) Data analysis, including analysis of identifiable private information or identifiable biospecimens; and/or 2) Accessing follow-up clinical data from procedures that subjects would undergo as part of clinical care.*
- ☐ The remaining research activities are limited only to data analysis. There is access to records or specimens either directly or through codes or links to the data.*
- ☐ The remaining research activities are limited only to data analysis. There is no subject/record/specimen identifying codes or links to the data; the researcher or research team cannot readily ascertain the subject's identity.*
- ☐ All study activities are complete. IRB approval can be inactivated.

*Possibility that review will move from Full to Expedited.

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2. If subjects have been enrolled within the last year, and the IRB approved a consent/assent form for your study:

Please attach a complete, signed copy for the last two subjects enrolled with **each** consent/assent form/HIPAA form since the last annual review.
(Example: If 3 different approved consent forms were used since the last annual review, please provide the two most recent signed copies of each version for a total of six.)

Attachments

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3. Informed Consent

If the study is **open to subject enrollment, please go to the Informed Consent section of the E-IRB Application and verify attachment(s) include:**

- One clean copy in PDF (without the IRB Approval stamp) of the currently approved consent/assent document(s), or,
- If requesting changes to the consent/assent document(s), submit one copy with the changes highlighted (and designate Document Type as "Highlighted"), and one clean copy in PDF (without the changes highlighted).

If the study is **open to subject enrollment and the IRB has waived the requirement to document informed consent, please go to the Informed Consent section of the E-IRB Application and verify attachment(s) include:**

- One clean copy in PDF of the currently approved document used for the informed consent process (e.g., cover letter, phone script), or,
- If requesting changes to the consent/assent document(s), submit one copy with the changes highlighted (and designate Document Type as "Highlighted"), and one clean copy in PDF (without the changes highlighted).

If the study is **closed to subject enrollment, please go to the Informed Consent section of the E-IRB Application and remove Informed Consent Documents designated to get an IRB approval stamp to avoid having them appear valid for enrollment.**

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4. Unanticipated Problems Involving Risk to Subjects or Others/Adverse Events Summary & Assessment

Did any **problems/adverse events** occur during the last 12 months?

○ Yes ◉ No

In the space below, provide a written summary of both unanticipated problems* and available information regarding adverse events since the last review (e.g., initial review or annual/continuing review). The amount of detail provided in such a summary will vary depending on the type of research being conducted; in many cases, such a summary could be a brief statement that there have been no unanticipated problems and that adverse events have occurred at the expected frequency and level of severity as documented in the research protocol, the informed consent document, and investigator's brochure (if applicable). **The summary must include the PI's assessment whether the problems/adverse events warrant changes to the protocol, consent process, or risk/benefit ratio.**

Note: It is the IRB's expectation that all unanticipated problems involving risk to subjects or others or related deaths requiring prompt reporting are submitted in the appropriate time frame (See Policy [PDF]). Your response to this Annual/Continuing Review is considered assurance that all prompt reportable problems/adverse events have been submitted for IRB review.

*For multisite studies, the written summary should describe external events determined to be unanticipated problems involving risk to subjects or others.

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5. Subject Info To-Date

Our records for the previously approved IRB application indicate the **IRB approved estimate** of subjects to be enrolled (or records/specimens reviewed) is:

100

Enter the number of enrolled subjects (or records/specimens reviewed) that **have not been previously reported** to the IRB

39

Our records for the previously approved IRB application indicate the previous total # of subjects enrolled (or records/specimens reviewed) since activation of the study is:

97

The new total number of subjects enrolled (or records/specimens reviewed) since activation of the study:

136

Please review the Project Info section for the IRB approved estimate of subjects to be enrolled (or records/specimens reviewed). If this new total exceeds your approved estimate of subjects to be enrolled (or records/specimens reviewed), please update the number in the field for Number of Human Subjects in the Project Info section.

6. Data and Safety Monitoring Board (DSMB)/Plan (DSMP)

If your study is monitored by a DSMB or under a DSMP, attach all documentation (i.e. summary report; meeting minutes) representing Data and Safety Monitoring activities that have not been previously reported to the IRB.

Attachments

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7. Since the most recent IRB Initial/Continuation Review Approval:

Have there been any **participant complaints** regarding the research?

○ Yes ◉ No

If yes, in the field below, provide a summary describing the complaints.

Have any **subjects withdrawn** from the research voluntarily or by you as the PI for reasons related to safety, welfare, or problems related to the conduct of the research? If a participant does not meet the screening criteria for a study even if they signed a screening consent it is NOT considered a withdrawal.

○ Yes ◉ No

If yes, in the field below, provide a detailed explanation to the withdrawal(s) including if participants were lost to contact.

Has any **new and relevant literature** been published since the last IRB review, especially literature relating to risks associated with the research?

○ Yes ◉ No

If yes, attach a copy of the literature as well as a brief summary of the literature including, if pertinent, the impact of the findings on the protection of human subjects.

Attachments

Have there been any **interim findings?**

○ Yes ◉ No

If yes, attach a copy of **Interim Findings**.

Attachments

Have **subjects experienced any benefits?**

○ Yes ◉ No

If yes, in the field below, provide a description of benefits subjects have experienced.

Have there been any **inspections/audits/quality improvement reviews** of your research protocol resulting in the need for corrective action in order to protect the safety and welfare of subjects?

○ Yes ◉ No

If yes, please attach documentation evidencing the outcome(s) and any corrective action(s) taken as a result.

Attachments

Was an FDA 483 issued as a result of any inspections/audits?

○ Yes ◉ No

If yes, submit documentation using attachment button above.

8. Risk Level:

Our records for the previously approved IRB application show your research is:

Risk Level: **3**

Has something during the course of your research changed the level of risk?

○ Yes ◉ No

If yes, go to the Risk Level section, mark the appropriate risk level, and in the field below, describe why the risk level has changed:

9. Funding/Support:

Our records for the **previously approved** IRB application indicate your research is being submitted to, supported by, or conducted in cooperation with the following external or internal agency(ies) or funding program(s):

☐ Grant application pending
☑ (HHS) Dept. of Health & Human Services

- [x] (NIH) National Institutes of Health
- [ ] (CDC) Centers for Disease Control & Prevention
- [ ] (HRSA) Health Resources and Services Administration
- [ ] (SAMHSA) Substance Abuse and Mental Health Services Administration
- [ ] (DoJ) Department of Justice or Bureau of Prisons
- [ ] (DoE) Department of Energy
- [ ] (EPA) Environmental Protection Agency
- [ ] Federal Agencies Other Than Those Listed Here
- [ ] Industry (Other than Pharmaceutical Companies)
- [ ] Internal Grant Program w/ proposal
- [ ] Internal Grant Program w/o proposal
- [ ] National Science Foundation
- [ ] Other Institutions of Higher Education
- [ ] Pharmaceutical Company
- [ ] Private Foundation/Association
- [ ] U.S. Department of Education
- [ ] State

Other:

Please **update the Funding/Support section of your IRB application** if needed, including the following attachments if they contain changes not previously reported to the IRB:

- A current copy of your **protocol if you are conducting industry/pharmaceutical research;**
- A current **Investigator Brochure** (submit a copy with all changes underlined).
- A **new or revised grant application** for this project.

Did your project receive extramural funding?

(•) Yes ( ) No

If yes, please review and correct if necessary, the OSPA Account # information under the **Funding/Support section** of your IRB application.

If the project is externally funded, has the sponsor offered any of the research team enrollment incentives or other personal benefit bonuses? (e.g., cash/check, travel reimbursements, gift checks, etc.)

( ) Yes (•) No ( ) N/A

Note: It is University of Kentucky policy that personal benefit bonuses are not allowed. If these conditions change during the course of the study, please notify the IRB.

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10. Project Information

Our records for the previously approved IRB application indicate your estimated project end date is:

01/01/2025

If you have a new estimated project end date, please go to the Project Info section and change the date in the field for Anticipated Ending Date of Research Project.

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11. Study Personnel

Our records for the previously approved IRB application indicate the following individuals are study personnel on this project (if applicable):

Last Name	First Name
Curry	Thomas
Elkins	Anjeli
Griffith	Annie
Hays	Lon

Last Name	First Name
Heymsfeld	Sarah
Litteral	Carleigh
Martel	Michelle
Padgett	Kelsey
Ramirez	Miranda
Robinson	Layne
Sizemore	Yancey
Van Doorn	Catherine

Please review the individuals listed above and update your records as needed in the Study Personnel section of the E-IRB application, being sure that each individual listed has completed or is up-to-date on the mandatory human research protection training [see the policy on Mandatory Human Subject Protection Training FAQs (required every three years)].

12. Progress of the Research

To meet federal requirements the IRB is relying on your RESEARCH DESCRIPTION as a protocol summary and their expectation is that it is up-to-date. If the currently approved protocol (or research description) in your E-IRB application is outdated, please make applicable changes, and describe in the field below any substantive changes and explain why they are essential. If none, insert "N/A" in the text field below. If you are closing your study, you may use the space below to summarize the final status of the research.

n/a

Note: No changes in the research procedures should have occurred without previous IRB review. Approval from the IRB must be obtained before implementing any changes.

Provide a brief **summary** of any **modifications that affect subject safety and/or welfare** approved by the IRB since the last initial or continuation review (If none, insert "N/A" in the text field below.):

n/a

Attach one copy of the most recent progress report sent to the FDA, if available. All PI-sponsored IND/IDE studies are required to submit a copy of the FDA progress report.

Attachments

13. Confidentiality/Security

Review your Research Description section and update the Confidentiality portion, if necessary, to describe measures for security of electronic and physical research records (e.g., informed consent document(s), HIPAA Authorization forms, sensitive or private data).

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14. Subject Demographics

Our records for the previously approved IRB application indicate the following categories of subjects and controls are included in your research:

- ☐ Children (individuals under age 18)
- ☐ Wards of the State (Children)
- ☐ Emancipated Minors
- ☐ Students
- ☐ College of Medicine Students
- ☐ UK Medical Center Residents or

House Officers
- ☐ Impaired Consent Capacity Adults
- ☐ Pregnant Women/Neonates/Fetal Material
- ☐ Prisoners
- ☐ Non-English Speaking
- ☐ International Citizens
- ☑ Normal Volunteers
- ☐ Military Personnel and/or DoD Civilian Employees
- ☐ Patients
- ☐ Appalachian Population

Please review the Subject Demographics section of your IRB application for accuracy, and note the following:

If during the course of your research 1) any prisoners have been enrolled, OR 2) subjects have been enrolled that became involuntarily confined/detained in a penal institution that have not been previously reported to the IRB, go to Subject Demographic section in your E-IRB application and mark “prisoners” in the categories of subjects to be included in the study, if it is not already marked.

Note: If either 1 or 2 above apply, and you have received funding from the Department of Health and Human Services (HHS), a Certification Letter should have been submitted to the Office for Human Research Protections (OHRP); prisoners and individuals who have become involuntarily confined/detained in a penal institution cannot continue participation in the research until OHRP issues approval. If the Certification has not been submitted, contact the Office of Research Integrity.

Based on the **total # of subjects** who have enrolled, complete the subject demographic section below:

Participant Demographics

	Cisgender Man	Cisgender Woman	TGNB/TGE	Unknown/Not Reported
American Indian/Alaskan Native				
Asian		2		
Black or African American		8		
Latinx		3		
Native Hawaiian or Other Pacific Islander				
White		72		
American Arab/Middle Eastern/North African				
Indigenous People Around the World				
More than One Race		10		
Unknown or Not Reported		41		

If unknown, please explain why:

Demographics are not recorded for subjects deemed inelgiable.

15. Research Sites

Our records for the previously approved IRB application indicate that you are conducting research at the following sites:

UK Sites

- [x] UK Classroom(s)/Lab(s)
- [ ] UK Clinics in Lexington
- [ ] UK Clinics outside of Lexington
- [ ] UK Healthcare Good Samaritan Hospital
- [ ] UK Hospital

Schools/Education Institutions Schools/Education Institutions

- [ ] Fayette Co. School Systems *
- [ ] Other State/Regional School Systems
- [ ] Institutions of Higher Education (other than UK)

Other Medical Facilities

- [ ] Bluegrass Regional Mental Health Retardation Board
- [ ] Cardinal Hill Hospital
- [ ] Eastern State Hospital
- [ ] Nursing Homes
- [ ] Shriner's Children's Hospital
- [ ] Other Hospitals and Med. Centers

- [ ] Correctional Facilities
- [ ] Home Health Agencies
- [ ] International Sites

Other:

If the above listed sites are not accurate, go to the Research Sites section of the E-IRB application to update the facilities at which research procedures have been or will be conducted.

If you are adding a new off-site facility, you may also need to update your E-IRB application Research Description, Research Sites, Informed Consent, and other affected sections as well as any documents which will list the off-site facility. Documents needing updating may include, but not limited to:

- Consent forms (attachment under Informed Consent section)
- Brochures (attachment under Additional Info section)
- Advertisements (attachment under Research Description section) ;
- Letter of support (attachment under Research Sites section)).

Please revise applicable sections and attachments as necessary.

16. Disclosure of Significant Financial Interest

Disclosure of Significant Financial Interest:

Our records for the previously approved IRB application indicate that you, your investigators, and/or key personnel (KP) have a significant financial interest (SFI) related to your/their responsibilities at the University of Kentucky (that requires disclosure per the UK administrative regulation 7:2):

○ Yes ◉ No

If you need to update your records, please go to the PI Contact Information section and/or Details for individuals listed in the Study Personnel section to change your response to the applicable question(s).

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17. Supplementals

To ensure the IRB has the most accurate information for your protocol you are expected to re-visit the E-IRB application sections and make corrections or updates as needed. At a minimum you are being asked to review the following sections for accuracy:

STUDY DRUG INFORMATION—Please review for accuracy.
STUDY DEVICE INFORMATION—Please review for accuracy.
RESEARCH ATTRIBUTES—Please review for accuracy.
OTHER REVIEW COMMITTEES -- Please review for accuracy.

PROJECT INFORMATION

0 unresolved comment(s)

Title of Project: (Use the exact title listed in the grant/contract application, if applicable).
If your research investigates any aspect of COVID-19, please include "COVID19" at the beginning of your Project Title and Short Title

Estradiol effects on behavioral and reward sensitivity to alcohol across the menstrual cycle

Short Title Description
Please use a few key words to easily identify your study - this text will be displayed in the Dashboard listing for your study.

Estradiol effects on alcohol

Anticipated Ending Date of Research Project: 1/1/2026

Maximum number of human subjects (or records/specimens to be reviewed) 240

After approval, will the study be open to enrollment of new subjects or new data/specimen collection? ◉ Yes ○ No

Are you requesting that the UK IRB serve as the lead IRB for a multi-site study, **OR** that the UK IRB defer review to another IRB? [Click here for "IRB Reliance" help]
○ Yes ◉ No
If "Yes," before completing your IRB application, fill out the Reliance Request Form and submit it to irbreliance@uky.edu.

PI CONTACT INFORMATION

0 unresolved comment(s)

Principal Investigator (PI) role for E-IRB access
The PI is the individual holding primary responsibility on the research project with the following permissions on the E-IRB application:

1. Read;
2. write/edit;
3. receive communications; and
4. submit to the IRB (IR, CR, MR, Other Review*).

If research is being submitted to or supported by an extramural funding agency such as NIH, a private foundation or a pharmaceutical/manufacturing company, the PI listed on the grant application or the drug protocol must be listed as PI here.

Please fill in any blank fields with the appropriate contact information (gray shaded fields are not editable). Required fields left blank will be highlighted in pink after you click "Save".

To change home and work addresses, go to myUK and update using the Employee Self Service (ESS) portal. If name has changed, the individual with the name change will need to submit a 'Name Change Form' to the Human Resources Benefits Office for entering into SAP. The new name will need to be associated with the individual's Link Blue ID in SAP before the change is reflected in E-IRB. Contact the HR Benefits Office for additional information.

The Principal Investigator's (PI) contact information is filled in automatically based on who logged in to create the application.

If you are not the Principal Investigator, do NOT add yourself as study personnel.
To change the PI contact information on an application in Researcher edit status:

- click "Change Principal Investigator";
- search for the PI's name using the search feature;
- click "Select" by the name of the Principal Investigator, then "Save Contact Information".

  You will automatically be added as study personnel with editing permissions to continue editing the application.

Change Principal Investigator:

First Name:	Mark	Room# & Bldg:	220B KASTLE HALL
Last Name:	Fillmore	Speed Sort#:	405060044
Middle Name			
Department:	Psychology - 8E120	Dept Code:	8E120
PI's Employee/Student ID#:	00007568	Rank:	Professor
PI's Telephone #:	8592574728	Degree:	Ph.D.
PI's e-mail address:	Fillmore@uky.edu	PI's FAX Number:	8593231979
PI is R.N.	○ Yes ◉ No	HSP Trained:	Yes
		HSP Trained Date:	8/31/2023
		RCR Trained:	Yes

Do you, the PI, have a significant financial interest related to your responsibilities at the University of Kentucky (that requires disclosure per the UK administrative regulation 7:2)?

○ Yes ◉ No

RISK LEVEL

0 unresolved comment(s)

Indicate which of the categories listed below accurately describes this protocol

- ○ (Risk Level 1) Not greater than minimal risk
- ○ (Risk Level 2) Greater than minimal risk, but presenting the prospect of direct benefit to individual subjects
- ◉ (Risk Level 3) Greater than minimal risk, no prospect of direct benefit to individual subjects, but likely to yield generalizable knowledge about the subject's disorder or condition.
- ○ (Risk Level 4) Research not otherwise approvable which presents an opportunity to understand, prevent, or alleviate a serious problem affecting the health or welfare of subjects.

*"Minimal risk" means that the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves from those ordinarily encountered in daily life or during the performance of routine physical or psychological examination or tests.

Refer to UK's guidance document on assessing the research risk for additional information.

SUBJECT DEMOGRAPHICS **0 unresolved comment(s)**

Age level of human subjects: (i.e., 6 mths.; 2yrs., etc..) 21 to 35

Study Population:

Describe the characteristics of the subject population, including age range, gender, ethnic background and health status. Identify the criteria for inclusion and exclusion.

Provide the following information:

- A description of the subject selection criteria and rationale for selection in terms of the scientific objectives and proposed study design;
- A compelling rationale for proposed exclusion of any sex/gender or racial/ethnic group;
- Justification for the inclusion of vulnerable groups such as children, prisoners, adults with impaired consent capacity, or others who may be vulnerable to coercion or undue influence.

Please consider these resources:
NIH Diversity Policy
FDA Diversity Guidance

Based on the research question on estrogen (E2) effects on drinking in normally-cycling young women, the sample – by scientific necessity – will be exclusively women.. All women will be between ages 21 and 35 in order to assure that they have completed puberty, are premenopausal, have regularly-occurring cycles, and are roughly in the same phase of life (i.e., young adulthood). Power analyses indicate that a final sample of 100 women is sufficient to answer study questions based on an expected small to medium effect sizes, based on prior studies and our own pilot data. Our pilot data indicates that 240 women will likely need to be screened to arrive at this final sample size of 100 women. The inclusion of all women is in line with current NIH initiatives to advance understanding of health problems in women and will advance personalized assessment of mental health in women by elucidating possible ovulation-based hormonal fluctuations increasing risk for binge drinking. Therefore, the sample will be comprised completely of young women.
Ethnic and racial minority recruitment is expected to occur in the same rate as in the local community. The racial and ethnic make-up of the present study is expected to reflect the community make-up, with approximately 75% of subjects identifying themselves as Caucasian, 15% as African-American, 4% as Asian, and 6% as Hispanic or Latino. Ethnic diversity status will be determined at the intake session by responses on the demographic questionnaire, in accordance with the categories set forth by the OMB guidelines. No one will be excluded based on ethnic or racial minority status. Should participation of minority groups fall below representative levels we will focus advertisements in primarily African-American groups and organizations on the college campus and in the surrounding community. Proposed outreach programs include formal advertisement (i.e., regular newspaper advertisements placed generally in free newspapers and radio messages), local flyers posted in public areas (e.g., bars and marketplaces), word-of-mouth, and the Internet. Such strategies have proved effective at increasing minority enrollment in previous research.
In order to obtain a sample of women who have completed puberty, have regularly-occurring cycles, and who have the same general life experiences, participants will be women between ages 21 and 35. All participants will complete the informed consent procedure before providing personal information. During the informed consent procedure, participants will be informed about study procedures, tasks, risks and benefits, and participants will be given an opportunity to ask questions before they provide written consent. Participants will be informed that they can withdraw from the research at any time. Procedures and consent forms will comply with requirements of the University of Kentucky Institutional Review Board.
Exclusion Criteria:
• use of hormone-based medications (e.g., hormone-based birth control or steroids)
• known hormonal abnormalities (e.g., Polycystic Ovarian Syndrome, thyroid conditions)
• irregular menstrual cycles (i.e., varying by more than 10 days between cycles; any cycle less than 25 days or over 35 days in length, as indicated by self report of cycle length over past 3 months)
• current pregnancy
• primary sensorimotor handicap
• frank neurological disorder (e.g., seizure disorders, brain tumor, cerebral palsy, hydrocephalus, head injury with loss of consciousness)
• pervasive developmental disorder (i.e., autism, Asperger's, Rett's, childhood disintegrative disorder)
• frank psychosis (i.e., schizophrenia, hallucinations, delusions)
• diagnosed intellectual disability
• medical condition contraindicating alcohol use
• a substance abuse history (with the exception of nicotine)
• body mass index of 30 or above
• alcohol abstainer

Attachments

Indicate the targeted/planned enrollment of the following members of minority groups and their subpopulations. Possible demographic sources: Census Regional Analyst Edition, Kentucky Race/Ethnic Table, Kentucky Population Data.
(Please note: The IRB will expect this information to be reported at Continuation Review time for Pre-2019 FDA-regulated Expedited review and Full review applications):

Participant Demographics

	Cisgender Man	Cisgender Woman	TGNB/TGE	Unknown/Not Reported
American Indian/Alaskan Native:				
Asian:		2		
Black/African American:		8		
Latinx:		3		
Native Hawaiian/Pacific				

Islander:				
White:		72		
American Arab/Middle Eastern/North African:				
Indigenous People Around the World:				
More than One Race:		10		
Unknown or Not Reported:		41		

If unknown, please explain why:

Demographics are not recorded for subjects deemed inelgiable

Indicate the categories of subjects and controls to be included in the study. You may be required to complete additional forms depending on the subject categories which apply to your research. If the study does not involve direct intervention or direct interaction with subjects, (e.g., record-review research, outcomes registries), do not check populations which the research does not specifically target. For example: a large record review of a diverse population may incidentally include a prisoner or an international citizen, but you should not check those categories if the focus of the study has nothing to do with that status.

Check All That Apply (at least one item must be selected)

- ☐ Children (individuals under age 18)
- ☐ Wards of the State (Children)
- ☐ Emancipated Minors
- ☐ Students
- ☐ College of Medicine Students
- ☐ UK Medical Center Residents or House Officers
- ☐ Impaired Consent Capacity Adults
- ☐ Pregnant Women/Neonates/Fetal Material
- ☐ Prisoners
- ☐ Non-English Speaking (translated long or short form)
- ☐ International Citizens
- ☑ Normal Volunteers
- ☐ Military Personnel and/or DoD Civilian Employees
- ☐ Patients
- ☐ Appalachian Population

ADDITIONAL INFORMATION:

Please visit the IRB Survival Handbook for more information on:

- Children/Emancipated Minors
- Students as Subjects
- Prisoners
- Impaired Consent Capacity Adults
- Economically or Educationally Disadvantaged Persons

Other Resources:

- UKMC Residents or House Officers [see requirement of GME]
- Non-English Speaking [see also the E-IRB Research Description section on this same topic]
- International Citizens [DoD SOP may apply]
- Military Personnel and/or DoD Civilian Employees

Assessment of the potential recruitment of subjects with impaired consent capacity (or likelihood):

☐ Check this box if your study does NOT involve direct intervention or direct interaction with subjects (e.g., record-review research, secondary data analysis). If there is no direct intervention/interaction you will not need to answer the impaired consent capacity questions.

Does this study focus on adult subjects with any conditions that present a high *likelihood* of impaired consent capacity or *fluctuations* in consent capacity? (see examples below)

○ Yes ◉ No

If Yes and you are not filing for exemption certification, go to "Form T", complete the form, and attach it using the button below.

Examples of such conditions include:

- Traumatic brain injury or acquired brain injury
- Severe depressive disorders or Bipolar disorders
- Schizophrenia or other mental disorders that involve serious cognitive disturbances
- Stroke
- Developmental disabilities
- Degenerative dementias
- CNS cancers and other cancers with possible CNS involvement
- Late stage Parkinson's Disease
- Late stage persistent substance dependence
- Ischemic heart disease
- HIV/AIDS
- COPD
- Renal insufficiency
- Diabetes
- Autoimmune or inflammatory disorders
- Chronic non-malignant pain disorders
- Drug effects
- Other acute medical crises

Attachments

INFORMED CONSENT/ASSENT PROCESS/WAIVER

0 unresolved comment(s)

For creating your informed consent attachment(s), please download the most up-to-date version listed in "All Templates" under the APPLICATION LINKS menu on the left, and edit to match your research project.

Additional Resources:

- Informed Consent/Assent Website
- Waiver of Consent vs. Waiver of Signatures
- Sample Repository/Registry/Bank Consent Template

Consent/Assent Tips:

- If you have multiple consent documents, be sure to upload each individually (not all in a combined file).
- If another site is serving as the IRB for the project, attach the form as a "Reliance Consent Form" so the document will not receive a UK IRB approval stamp; the reviewing IRB will need to stamp the consent forms.
- Changes to consent documents (e.g., informed consent form, assent form, cover letter, etc...) should be reflected in a 'tracked changes' version and uploaded separately with the Document Type "Highlighted Changes".
- It is very important that only the documents you wish to have approved by the IRB are attached; DELETE OUTDATED FILES -- previously *approved* versions will still be available in Protocol History.
- Attachments that are assigned a Document Type to which an IRB approval stamp applies will be considered the version(s) to be used for enrolling subjects once IRB approval has been issued.
  Document Types that do NOT get an IRB approval stamp are:
  - "Highlighted Changes",
  - "Phone Script", and
  - "Reliance Consent Form",
  - "Sponsor's Sample Consent Form".

How to Get the Section Check Mark

1. You must:

   a) provide a response in the text box below describing how investigators will obtain consent/assent, and
   b) check the box for at least one of the consent items and/or check mark one of the waivers

2. If applicable attach each corresponding document(s) **as a read-only PDF**.
3. If you no longer need a consent document approved (e.g., closed to enrollment), or, the consent document submitted does not need a stamp for enrolling subjects (e.g., umbrella study, or sub-study), only select "Stamped Consent Doc(s) Not Needed".
4. After making your selection(s) be sure to scroll to the bottom of this section and SAVE your work!

Check All That Apply

- [x] Informed Consent Form (and/or Parental Permission Form and/or translated short form)
- [ ] Assent Form
- [ ] Cover Letter (for survey/questionnaire research)
- [ ] Phone Script
- [ ] Informed Consent/HIPAA Combined Form
- [ ] Debriefing and/or Permission to Use Data Form
- [ ] Reliance Consent Form
- [ ] Sponsor's sample consent form for Dept. of Health and Human Services (DHHS)-approved protocol
- [ ] Stamped Consent Doc(s) Not Needed

Attachments

Attach Type	File Name
Informed Consent/HIPAA Combined Form	Consent 1.pdf
Informed Consent/HIPAA Combined Form	Consent 2.pdf
Informed Consent/HIPAA Combined Form	Horomone Entire Consent Form 2023.pdf

Informed Consent Process:

Using active voice, describe how investigators will obtain consent/assent. Include:

- the circumstances under which consent will be sought and obtained
- the timing of the consent process (including any waiting period between providing information and obtaining consent)
- who will seek consent
- how you will minimize the possibility of coercion or undue influence
- the method used for documenting consent
- if applicable, who is authorized to provide permission or consent on behalf of the subject
- if applicable, specific instruments or techniques to assess and confirm potential subjects' understanding of the information

Note: all individuals authorized to obtain informed consent should be designated as such in the E-IRB "Study Personnel" section of this application.

Special considerations may include:

- Obtaining consent/assent for special populations such as children, prisoners, or people with impaired decisional capacity
- *Research Involving Emancipated Individuals*
  If you plan to enroll some or all prospective subjects as emancipated, consult with UK legal counsel **prior to submitting this application to the IRB**. Include research legal counsel's recommendations in the "Additional Information" section as a separate document.
- *Research Involving Non-English Speaking Subjects*
  For information on inclusion of non-English speaking subjects, or subjects from a foreign culture, see IRB Application Instructions for Recruiting Non-English Speaking Participants or Participants from a Foreign Culture.
- *Research Repositories*
  If the purpose of this submission is to establish a research repository describe the informed consent process. For guidance regarding consent issues, process approaches, and sample language see the Sample Repository/Registry/Bank Consent Template.

Upon arriving at the lab, all participants' proof of age will be checked and each will be asked to sign an informed consent form describing the nature of the experiment and outlining all of the conditions for participation. Consent will be obtained by the MPIs. Participants complete a full written informed consent procedure with project staff online, prior to providing personal information regarding exclusionary criteria. The consent form provides the potential volunteer with information about the study (e.g., who is conducting it, contact information for the investigators and medical staff, how it is funded, where it will take place, and the purpose of the study), what will be required of the volunteer (e.g., time commitment, alcohol consumption, and dietary, drug, and alcohol use restrictions prior to and following sessions), the risks to the volunteer (e.g., side effects), the rights of the volunteer (e.g., confidentiality and voluntary participation), and the benefits of participating (e.g., monetary compensation and scientific knowledge). The informed consent form will be explained thoroughly and signed on-site. Each volunteer will receive a copy of their informed consent document and will sign a document indicating its receipt. The MPIs will review all screening materials and sign off on consent forms. After consent is obtained, participants will provide a breath sample to verify a zero BAC and urine sample to test for pregnancy and other drug use.
Our previous research in this area finds that participants are quite comfortable with the testing protocol and the reporting of information. Any complaints from the participants regarding the administration of this protocol will be responded to immediately. The PI will be informed of these issues, which will also be documented.

☐ Request for Waiver of Informed Consent Process

If you are requesting IRB approval to waive the requirement for the informed consent process, or to alter some or all of the elements of informed consent, complete, Section 1 and Section 2 below.

Note: The IRB does not approve waiver or alteration of the consent process for greater than minimal risk research, except for planned emergency/acute care research as provided under FDA regulations. Contact ORI for regulations that apply to single emergency use waiver or acute care research waiver (859-257-9428).

SECTION 1.

Check the appropriate item:

☐ I am requesting a waiver of the requirement for the informed consent process.

☐ I am requesting an alteration of the informed consent process.

If you checked the box for this item, describe which elements of consent will be altered and/or omitted, and justify the alteration.

SECTION 2.

Explain how each condition applies to your research.

a) The research involves no more than minimal risk to the subject.

b) The rights and welfare of subjects will not be adversely affected.

c) The research could not practicably be carried out without the requested waiver or alteration.

d) Whenever possible, the subjects or legally authorized representatives will be provided with additional pertinent information after they have participated in the study.

e) If the research involves using or accessing identifiable private information or identifiable biospecimens, the research could not practicably be carried out without using such information or biospecimens in an identifiable format.

- Private information/specimens are “identifiable” if the investigator may ascertain the identity of the subject or if identifiers are associated with the information (e.g., medical records). This could be any of the 18 HIPAA identifiers including dates of service.
- If not using identifiable private information or identifiable biospecimens, insert N/A below.

☐ Request for Waiver of Signatures

If you are requesting IRB approval to waive the requirement for signatures on informed consent forms, **your research activities must fit into one of three regulatory options**:

1. The only record linking the participant and the research would be the consent document, and the principal risk would be potential harm resulting from a breach of confidentiality (e.g., a study that involves participants who use illegal drugs).
2. The research presents no more than minimal risk to the participant and involves no procedures for which written consent is normally required outside of the research context (e.g., a cover letter on a survey, or a phone script).
3. The participant (or legally authorized representative) is a member of a distinct cultural group or community in which signing forms is not the norm, the research presents no more than minimal risk to the subject, and there is an appropriate alternative mechanism for documenting that informed consent was obtained.

Select the option below that best fits your study.

*If the IRB approves a waiver of signatures, participants must still be provided oral or written information about the study. To ensure you include required elements in your consent document, use the **Cover Letter Template** as a guide. There is an English and a Spanish version.*

○ **Option 1**

Describe how your study meets these criteria:

a) The only record linking the participant and the research would be the consent document:

b) The principal risk would be potential harm resulting from a breach of confidentiality (i.e., a study that involves subjects who use illegal drugs).

Under this option, each participant (or legally authorized representative) must be asked whether (s)he wants to sign a consent document; if the participant agrees to sign a consent document, only an IRB approved version should be used.

○ **Option 2**

Describe how your study meets these criteria:

a) The research presents no more than minimal risk to the participant:

b) Involves no procedures for which written consent is normally required outside of the research context (i.e. a cover letter on a survey, or a phone script):

○ **Option 3**

Describe how your study meets these criteria:

a) The subject (or legally authorized representative) is a member of a distinct cultural group or community in which signing forms is not the norm.

b) The research presents no more than minimal risk to the subject.

c) There is an appropriate alternative mechanism for documenting that informed consent was obtained.

STUDY PERSONNEL **0 unresolved comment(s)**

Do you have study personnel who will be assisting with the research?
After selecting 'Yes' or 'No' you must click the 'Save Study Personnel Information' button.

(•) Yes ( ) No

Manage Study Personnel

Identify other study personnel assisting in research project:

- The individual listed as PI in the 'PI Contact Information' section should NOT be added to this section.
- If the research is required for a University of Kentucky academic program, the faculty advisor is also considered study personnel and should be listed below. ***Residents and students who are PI's are encouraged to designate the faculty advisor or at least one other individual as a contact with an editor role (DP).***
- Role: DP = Editor (individual can view, navigate, and edit the application for any review phase (IR, CR/FR, MR) or 'Other Review", and submit Other Reviews on behalf of the PI.)
- Role: SP = Reader (individual can view and navigate through the currently approved application only.)

To add an individual via the below feature:

- Search for personnel;
- Click "select" by the listing for the person you want to add;
- For each person, specify responsibility in the project, whether authorized to obtain informed consent, AND denote who should receive E-IRB notifications (contact status).

NOTE: Study personnel must complete human subject protection (HSP) and Responsible Conduct of Research (RCR) training before implementing any research procedures. For information about training requirements for study personnel, visit UK's HSP FAQ page, the RCR Getting Started page, or contact ORI at 859-257-9428. If you have documentation of current HSP training other than that acquired through UK CITI, you may submit it to ORI (HSPTrainingSupport@uky.edu) for credit.

Study personnel assisting in research project:

Last Name	First Name	Responsibility In Project	Role	AC	Contact	Degree	StatusFlag	(HSP)	(HSP)Date	(RCR)	Removed?	Last Updated	SFI	Active
Curry	Thomas	Co-Investigator	SP	Y	N	Ph.D.	P	Y	06/04/2023	Y	N	07/03/2019	N	Y
Elkins	Anjeli	Project Assistance/Support	SP	Y	N	M.A.	P	Y	08/13/2023	N	N	11/22/2020	N	Y
Griffith	Annie	Project Assistance/Support	SP	Y	N		S	Y	07/02/2024	Y	N	08/02/2021	N	Y
Hays	Lon	Co-Investigator	SP	Y	N	M.D.	P	Y	11/08/2023	Y	N	07/03/2019	N	Y
Heymsfeld	Sarah	Project Assistance/Support	SP	Y	N		P	Y	07/10/2022	N	N	08/10/2022	N	Y
Litteral	Carleigh	Project Assistance/Support	DP	Y	N		P	Y	07/24/2023	Y	N	09/13/2024	N	Y
Martel	Michelle	Co-Investigator	DP	Y	Y	Ph.D.	P	Y	02/28/2023	Y	N	07/10/2019	N	Y
Padgett	Kelsey	Study Coordinator	DP	Y	Y	MA	P	Y	04/06/2023	Y	N	04/05/2023	N	Y
Ramirez	Miranda	Project Assistance/Support	DP	Y	N		P	Y	03/17/2023	Y	N	09/13/2024	N	Y
Robinson	Layne	Project Assistance/Support	DP	Y	N		P	Y	08/02/2024	Y	N	09/13/2024	N	Y
Sizemore	Yancey	Project Assistance/Support	SP	Y	N		P	Y	05/23/2022	Y	N	07/14/2022	N	N
Van Doorn	Catherine	Project Assistance/Support	SP	N	N		P	Y	07/14/2022	Y	N	07/14/2022	N	Y
Allen	Holley	Project Assistance/Support	SP	Y	N	B.A.	S	N	06/15/2020	N	Y	09/13/2024	N	Y
Bansal	Pevitr	Project Assistance/Support	SP	Y	N	M.A.	S	Y	04/02/2022		Y	07/14/2022	N	N
Brown	Jaime	Study Coordinator	DP	Y	Y	B.A.	P	Y	11/09/2023	Y	Y	09/20/2024	N	Y
Burand	Calisse	Project Assistance/Support	SP	Y	N		P	Y	09/03/2023		Y	07/14/2022	N	Y
D'Agostino	Alexandra	Project Assistance/Support	SP	Y	N	M.S.	P	N	07/08/2020		Y	04/05/2023	N	N
Eng	Ashley	Project Assistance/Support	SP	Y	N	M.A.	P	Y	01/21/2023	Y	Y	10/26/2023	N	Y
Goh	Patrick	Project Assistance/Support	SP	Y	N	M.A.	S	Y	03/07/2022		Y	07/14/2022	N	N
Gurney	Elise	Study Coordinator	DP	Y	N		S	Y	03/30/2023	Y	Y	09/20/2024	N	Y
Halliburton	Alexa	Project Assistance/Support	SP	Y	N		P	N	08/22/2021		Y	08/31/2022	N	N
Naylor	Kelsey	Project Assistance/Support	SP	Y	N		S	N	08/25/2020		Y	08/30/2021	N	N
Smith	Cynthia	Project Assistance/Support	SP	N	N		P	Y	08/11/2022		Y	04/05/2023	N	Y

Last Name	First Name	Responsibility In Project	Role	AC	Contact	Degree	StatusFlag	(HSP)	(HSP)Date	(RCR)	Removed?	Last Updated	SFI	Active
Strzelecki	Ashley	Project Assistance/Support	SP	Y	N		P	Y	05/31/2023	N	Y	07/14/2022	N	Y
Thaxton	Melina	Project Assistance/Support	SP	Y	N	B.A.	P	N	02/26/2020		Y	07/14/2022	N	N
Verlinden	Justin	Project Assistance/Support	SP	Y	N		P	Y	02/27/2023	Y	Y	07/14/2022	N	Y
Weafer	Jessica	Project Assistance/Support	SP	Y	N	Ph.D.	N	N	06/04/2021	N	Y	10/25/2024	N	Y
Winkel	Fiona	Project Assistance/Support	SP	Y	N		S	N	08/26/2020		Y	08/30/2021	N	N

RESEARCH DESCRIPTION

0 unresolved comment(s)

You may attach a sponsor's protocol pages in the "Additional Information" section and refer to them where necessary in the Research Description. However, each prompt that applies to your study should contain at least a summary paragraph.

Pro Tips:

- **Save your work often to avoid losing data.**
- **Use one of the attachment buttons in this section or under the Additional Information section to include supplemental information with your application. During the document upload process, you will be able to provide a brief description of the attachment.**

Background

Include a brief review of existing literature in the area of your research. You should identify gaps in knowledge that should be addressed and explain how your research will address those gaps or contribute to existing knowledge in this area. For interventional research, search PubMed and ClinicalTrials.gov for duplicative ongoing and completed trials with same condition and intervention(s).

Alcohol use poses significant health problems particularly when characterized by bouts of heavy consumption (i.e., binges). It is now recognized that women demonstrate greater vulnerability to the adverse effects of alcohol, including greater physiological risk of organ damage (e.g., liver cirrhosis), than do men with comparable histories of alcohol use. Research suggests that ovarian hormones play a role in substance abuse. With regard to alcohol use, there is evidence to suggest that women may exhibit distinct patterns of heavy drinking across the menstrual cycle. Indeed, our preliminary research shows that surges in follicular estradiol [E2] at ovulation predict increased alcohol use in young women. Yet, to date no research has aimed to determine the specific behavioral mechanisms by which rapid surges in E2 confer increased abuse potential of alcohol. The proposed study directly examines ovarian hormone flux and acute sensitivity to alcohol to provide the first rigorous and integrative test of the hypothesis that rapid rises in estradiol increase the acute rewarding and disinhibiting effects of alcohol and that this heightened sensitivity increases alcohol use outside the laboratory. A sample of 100 naturally-cycling women will be examined daily over their menstrual cycle using an integrative combination of daily ecological assessments of hormone fluctuations and alcohol use along with strategically-timed laboratory tests of their acute sensitivity to the rewarding and disinhibiting effects of a controlled dose of alcohol. The findings will advance understanding of the neurobehavioral mechanisms linking E2 to alcohol abuse and inform clinical assessment practice by highlighting the importance of menstrual cycle phase and hormonal profiles when assessing alcohol abuse risk in young women. Heavy episodic or binge drinking is often cited as one of the top public health issues and is a particular problem among college students, affecting more than 6 million of them with negative consequences including unsafe sexual activity and assaults. Notably, substance abuse in women is on the rise, and animal research suggests that females exhibit distinct patterns of acquisition, maintenance, and relapse, as well as particularly troublesome functional and health consequences compared to men. Yet, women remain especially understudied. Although animal research suggests that ovarian hormones play a role in substance abuse, and aspects of substance abuse appear to vary cyclically across the monthly reproductive cycle in women, no work to date has evaluated cyclical hormonal associations with alcohol abuse in young adult women. The proposed research advances the field in a new direction by integrating the study of monthly hormonal fluctuations in young women with rigorous laboratory tests of their sensitivity to alcohol effects implicated in its abuse potential (e.g., rewarding, disinhibiting effects). Our pilot data suggests sex differences in sensitivity to the rewarding effects of alcohol in a controlled laboratory tests and further indicates that rapid surges in follicular estradiol [E2] around ovulation, when progesterone is low, predict dramatically increased alcohol use, an estimated 200% increase in units of alcohol consumed the next day. This is consistent with our empirically-supported scientific premise and theoretical model that ovulation, like puberty, enhances risk-taking behaviors, particularly in impulsive women. Yet, to date no research has aimed to determine the specific behavioral mechanisms by which rapid surges in E2 confer increased abuse potential of alcohol around ovulation. Such information would be critical for informing personalized intervention efforts for binge drinking in vulnerable young women.

The proposed longitudinal study builds on our relevant preliminary research with an integrative, mechanistic investigation that combines ecological daily assessments of hormone fluctuations and alcohol use with strategically-timed laboratory tests of acute sensitivity to the rewarding and disinhibiting effects of alcohol across to determine the behavioral mechanism by which E2 can affect drinking behavior in women. A short-term longitudinal study of 100 women will collect daily measures of hormone levels and alcohol use and conduct laboratory tests of sensitivity to the rewarding and disinhibiting effects of a controlled dose of alcohol at key points of the menstrual cycle. The daily saliva and self-report data will allow for a fine-grained investigation of the lagged correlations between E2 and daily alcohol use patterns and alcohol craving across the entire menstrual cycle. The two laboratory visits will test and compare the acute sensitivity to the rewarding and disinhibiting effects of a controlled dose of alcohol during the early follicular phase when E2 is low to the late follicular phase when E2 is rising. This work will provide the first rigorous integrative test of the hypothesis that rapid rises in estradiol increase rewarding and disinhibiting effects of a controlled dose of alcohol and that such increased sensitivity predicts with increased alcohol use outside the laboratory. Elucidation of the behavioral mechanisms by which estradiol surges can increase alcohol use would provide a critical advancement of neurobiological theory of alcohol abuse in women, an understudied area, as well as provide new directions for personalization of alcohol abuse treatment in women. Specifically, this work may suggest the need for hormone-stabilization intervention (e.g., oral contraceptives) for young women at risk for binge drinking, and identify cycle phases in which those in treatment might be more likely to relapse.

Objectives

List your research objectives. Please include a summary of intended research objectives in the box below.

AIM 1: Determine the degree to which phases across the menstrual cycles predict changes in ecological daily drinking patterns and self-reported craving. Hypothesis 1: Craving and alcohol intake will increase just prior to ovulation (during late follicular phase vs. early follicular phase) concomitantly with rising estrogen.

AIM 2: Determine the degree to which E2 surge, associated with ovulation, increases acute sensitivity to the rewarding and disinhibiting effects of a controlled dose of alcohol. Hypothesis 2: The rewarding and disinhibiting effects of a controlled dose of alcohol (vs. placebo) will increase just before ovulation (vs. early follicular phase) concomitantly with rising estrogen.

AIM 3: Test the degree to which the E2-related changes in sensitivity to rewarding and disinhibiting effects of alcohol explain changes in women's daily drinking patterns and self-reported craving across the menstrual cycle. Hypothesis 3: E2 surge-related increases in drinking behavior will be explained by heightened sensitivity to the acute rewarding and disinhibiting effects of alcohol.

Study Design

Describe and explain the study design (e.g., observational, secondary analysis, single/double blind, parallel, crossover, deception, etc.).

- *Clinical Research*: Indicate whether subjects will be randomized and whether subjects will receive any placebo.
- *Community-Based Participatory Research*: If you are conducting community-based participatory research (CBPR), describe strategies for involvement of community members in the design and implementation of the study, and dissemination of results from the study.
- *Qualitative research*: Indicate ranges where flexibility is needed, if a fixed interview transcript is not available, describe interview topics including the most sensitive potential questions.
- *Research Repositories*: If the purpose of this submission is to establish a Research Repository (bank, registry) and the material you plan to collect is already available from a commercial supplier, clinical lab, or established IRB approved research repository, provide scientific justification for establishing an additional repository collecting duplicate material. Describe the repository design and operating procedures. For relevant information to include, see the UK Research Biospecimen Bank Guidance or the UK Research Registry Guidance.

Subjects will attend a diagnostic visit to assess baseline clinical characteristics. In addition, subjects will attend two laboratory visits to test alcohol sensitivity at two key points in the cycle: during the early follicular phase when E2 is low and the late follicular phase when E2 is rising. Every day after their first laboratory visit for 35 consecutive days, women will provide saliva samples each morning to assess hormonal levels and complete a self-report on their drinking behavior and alcohol craving every evening through a secure online server.
The daily saliva and self-report data will allow for a fine-grained investigation of the lagged correlations between E2 and daily alcohol use patterns and alcohol craving across the entire menstrual cycle. The two laboratory visits will test and compare the acute sensitivity to the rewarding and disinhibiting effects of a controlled dose of alcohol during the early follicular phase when E2 is low and the late follicular phase when E2 is rising. After screening, study volunteers will be followed daily in order to assess when they start their next menstrual cycle (i.e., the day they start bleeding). Within 1-2 days of that point, volunteers are scheduled to attend their initial diagnostic visit. Participants are then counterbalanced to begin the study during either their early follicular phase (approximately day 5) or their late follicular phase (approximately day 12) which is also when they begin their 35 days of consecutive daily data collection. This serves to counterbalance the order of the two alcohol sensitivity test sessions: early follicular versus late follicular phase. Ovulation testing and daily salivary E2 will confirm the proximity of the late follicular phase to ovulation, with the goal of ovulation occurring 1-3 days after the late follicular visit, and capturing a higher, rising E2 level in the late follicular phase relative to a lower level in the early follicular phase. We overrecruit in order to assure analyses are appropriately powered and reliable.

Attachments

Subject Recruitment Methods & Advertising

Describe how the study team will identify and recruit subjects. Please consider the following items and provide additional information as needed so that the IRB can follow each step of the recruitment process.

- How will the study team identify potential participants?
- Who will first contact the potential subjects, and how?
- Will you use advertisements? If so, how will you distribute those?
- How and where will the research team meet with potential participants?
- If applicable, describe proposed outreach programs for recruiting women, minorities, or disparate populations.
- How you will minimize undue influence in recruitment?
- Attach copies of all recruiting and advertising materials (emails, verbal scripts, flyers, posts, messages, etc.).

For additional information on recruiting and advertising:

- IRB Application Instructions - Advertisements
- PI Guide to Identification and Recruitment of Human Subjects for Research

The study will recruit subjects through flyers, brochures, posters, Research Spotlights, ads placed on campus and in the surrounding community and region (Study Team will place/remove ads), including but not limited to the UK Medical Center, UK Clinics, Good Samaritan Hospital, Student Center, UHS, the 5 UK Center for Clinical and Translational Research wall mounts, Cardinal Hill, monitor screens, and area facilities and businesses. Subjects may be recruited through paid print and digital advertisements, including brochures, magazines, newspaper (e.g., Herald Leader, Bluegrass Area, Courier Journal, Cincinnati Enquirer, Health & Wellness, Chevy Chaser, Hamburg Journal, Business Lexington, or other publications in the surrounding region e.g., Bluegrass Regional print & digital ads, may include Appalachian counties), Radio (e.g., Sirius, Clear Channel, Cumulus, LM Communications, Public Radio,

Pandora, etc.), Television spots, scrolling information on community stations, and theater screens. Recruitment ads may also appear on billboards, Lextran buses, taxicabs, other transportation methods, and Craig'sList. The study will employ a pre-screening eligibility survey to determine if a volunteer meets basic inclusion/exclusion criteria. We will build and administer the eligibility survey on UK's REDCap which provides HIPAA compliant storage on UK servers and encrypted transmission of survey responses. The link will be included in study information sent to ResearchMatch participants who have indicated interest in the study. Before redirecting the volunteer outside of ResearchMatch and to the REDCap survey, the volunteer is once again asked to confirm their interest in completing the pre-screening survey. All advertisements will be approved by the UK Institutional Review Board (IRB) and the UK Office of Public Relations. Interested individuals will contact the experimenter by email. A general description of the study and the criteria for participation will be explained. The general requirements of the tasks will be described. It also will be explained that a participant must fast for 4 hours prior to test sessions. Prospective subjects are also told that a moderate dose of alcohol will be administered during two laboratory visits so that alternate transportation home is provided. The following initial inclusion criteria will be obtained as preliminary screening to be verified at the intake session: i) Confirmation of Age (21-35). Volunteers will be told to bring proof of age to the laboratory (e.g., driver's license or passport). ii) General Health Status. It will be explained that volunteers must be naturally cycling, not currently taking hormones, and not have any serious health problem that is contraindicated by alcohol use. iii) Drinking Status. It will be explained that all volunteers must be alcohol drinkers, who consume alcohol at least once per week. No abstainers will be tested. iv) No History of Drug or Alcohol Dependence. It will be explained that individuals in drug/alcohol treatment, or who have sought treatment, cannot participate. Volunteers will then respond to questions from the AUDIT. v) Pregnancy. Women will be asked if they are currently pregnant or breast feeding. It will be explained that no pregnant women or women who are breast feeding can participate in the study. Women will be told that they will be required to submit to a simple urine sample-pregnancy test (testing human chorionic gonadotrophin (HCG) levels) and that a non-negative result would disqualify them from participation. vi) Drug-urine Screen. It will be explained to subjects that they must submit a urine sample prior to each session that will be screened for other drug use that would disqualify them from participating. vii) Zero BAC Check. Volunteers will be informed in advance that they must have a zero BAC and will be given a breath test when they arrive for laboratory testing. viii). Any persons excluded from participation during screening will simply be thanked for their interest. Appropriate volunteers will be scheduled and instructed to abstain from alcohol and other drugs for 24 hours. They will also be instructed to fast for 4 hours prior to arrival for the laboratory test sessions which will always occur in the afternoon. Upon arriving at the lab, all participants' proof of age will be checked and each will be asked to sign an informed consent form describing the nature of the experiment and outlining all of the conditions for participation.
Women ages 21-35 years who drink at least weekly and who are naturally cycling and not currently taking hormones are invited to participate in the study. This study will be advertised on recruitment internet webpages in digital or video form (e.g., UKclinicalresearch.com, ResearchMatch.org, CenterWatch.com, CISCRP, UK, CCTS and may utilize Google Adwords). The study will be promoted via social media, including Facebook boost ads, UK_CCTS Facebook, UK_CCTS Twitter, UK_CCTS Instagram, UK and UKHC social media, and departmental/lab pages. If advertised on UKClinicalresearch.com, the online study flyer will include an option for interested individuals to enter and submit their contact information, they will be asked whether study team can contact them (Yes or No) via study-related text messages, and CCTS will also ask, 'How did you learn about the study? Internet and social media recruitment will follow the terms of use for each site utilized. The study will also be promoted through UK HC monitor screens. Potential participants may be identified from registry databases, including but not limited to ResearchMatch.org, Wellness Health and You, Sanders Brown Center on Aging, Infectious Disease, Dentistry, and the Markey Cancer Center. The CCTS attends outreach activities to promote research participation in general (e.g., Roots & Heritage Festival, Latino Festival, Eastern Kentucky University, Transylvania Health fairs, etc.) and will bring all relevant study flyers that are enrolling participants. This study may also go out on email distribution, listservs, or e- newsletters, e.g., the CCTS list serv, Markey Cancer Affiliates list servs, ResearchMatch.org, Wednesday's Word, Kentucky Office of Rural Health (KORH), Appalachian Translational Research Network (ATRN), etc. We may utilize physician referral letters to community physicians for patient recruitment. Articles and interviews about the researchers and research study may be promoted via UKNow, Kentucky living, and other media outlets. Research and study-related articles published on UKNow may contain standard language directing interested individuals on where to read more about research and current studies. UKPR, UK HealthCare marketing or the CCTS PRS may create videos to promote research, researchers and their studies to local, regional and national media venues and on internal hospital monitors. UK HealthCare may place study recruitment flyers on their internal and external racks (e.g., UK pharmacies, clinics, UK Libraries and Lexington Libraries) or on digital monitors. Participants may be recruited using newsletters, such as In the Loop, Health Matters, Making a difference, and external news letters. The study may also be advertised through UKPR and UKHC outreach activities. All of these sources will be used to recruit participants from the Lexington area and surrounding counties. Interested individuals will contact the project coordinator by email to complete screening. All advertisements will be approved by the UK Institutional Review Board (IRB) and the UK Office of Public Relations. The investigators have extensive experience using this recruitment procedure in communities for alcohol and other drug studies and have recruited over 5000 participants using this method in the past 25 years.

Attachments

Attach Type	File Name
Advertising	Hormone grant GeneralFlyer PR edits STAMPED.pdf

Research Procedures

Describe how the research will be conducted.

- What experience will study participants have?
- What will study participants be expected to do?
- How long will the study last?
- Outline the schedule and timing of study procedures.
- Provide visit-by-visit listing of all procedures that will take place.
- Identify all procedures that will be carried out with each group of participants.
- Describe deception and debrief procedures if deception is involved.

Differentiate between procedures that involve standard/routine clinical care and those that will be performed specifically for this research project. List medications that are explicitly forbidden or permitted during study participation.

Initial Diagnostic Visit: Participants who meet study eligibility criteria based on screening will be asked when they expect to start their next menstrual cycle. They will then be scheduled for a diagnostic visit within 7 days before the expected cycle onset. During the diagnostic, visit volunteers provide a comprehensive medical and psychiatric history and body measurements are obtained (BMI) at this visit. A comprehensive evaluation of participants' drinking patterns is also conducted using the Timeline Follow-Back, Personal Drinking Habits Questionnaire (PDHQ), and the Alcohol Use Disorders Identification Test (AUDIT). Participants also complete the Adult Self Report (ASR) Psychopathological Comorbid Problems, a broadband, reliable and valid, behavioral rating scale that provides an empirical assessment of emotional and behavioral problems in adults ages 18-59 years. Participants also complete a well-established clinical diagnostic intervention (SCID, DSM-5). During the visit volunteers also receive a demonstration on saliva sample collection for the daily hormone assay. Staff members provide participants detailed instructions on at-home data collection verbally and in writing. Participants receive a take-home packet of data collection materials (i.e., labeled spit tubes) and instructions about how to collect their spit and urine samples and how to perform daily data entry on our secure online server to commence on day 5 or day 12 of their cycle as determined by their randomly assigned start time. Participants are provided with the telephone number of a research assistant in case they have any questions. Participants also provide multiple contacts (phone, text, email) so they can receive data collection reminders.

When the participant starts their next cycle, their two alcohol sensitivity test sessions (early and late follicular tests) are scheduled with test order counterbalanced across participants. The early follicular phase lab visit will be scheduled on day 5 of their cycle. The late follicular phase lab visit will be scheduled based on self-reported onset of menses and their self-reported average cycle length using the following formula: (self-reported typical cycle length - 14 days of luteal phase = typical follicular phase length) * 0.85. This formula produces a day that is toward the end of the participant's typical follicular phase, when E2 will be rising sharply just prior to ovulation, and has resulted in minimally burdensome detection of ovulation in our previous studies. For a typical 28-day cycle, this would be approximately day 12. In order to confirm that the cycle is ovulatory and the proximity of the late follicular visit to ovulation, women will complete urine ovulation testing following their late follicular visit, described below. Participants provide multiple contacts (phone, text, email) for visit reminders.

For the 35 days of daily data collection, starting the day after the first counterbalanced laboratory visit, participants provide saliva samples each morning approximately thirty minutes after waking and then store samples in their home freezers. Several procedures and quality control checks will be implemented to ensure rigorous and reliable data collection. During days 12-25, participants will take urinary ovulation tests each morning and submit the results. Every evening between 6 and 10 pm, they are instructed to log onto a secure website to complete a brief set of questions about their alcohol intake and alcohol craving (detailed below) which are time- and date-stamped so accuracy of data collection can be monitored. Participants receive twice daily reminders about data collection, and they are texted if they miss more than 2 consecutive days of data collection. Compliance with data collection procedures will be facilitated through incentives, a procedure that was piloted with success during preliminary data collection. Participants will be paid up to $440 for complete data collection, but will lose $5 for every missed survey. At the end of the 35 days, study staff contact participants and arrange for a time for them to return their saliva samples to the laboratory for storage in a -80 degree freezer, as well as receive their payment. Following the end of data collection, saliva samples are sent in bulk to the Center for Clinical and Translational Science (CCTS) on the University of Kentucky campus for at-cost assay.

Laboratory Testing of Alcohol Sensitivity: Participants attend two identical laboratory sessions to test sensitivity to the rewarding and disinhibiting effects of a controlled dose of alcohol, once during the early follicular phase and once during the late follicular phase. Testing will start between 11:00am-6:00pm. Participants will be required to fast for four hours and abstain from drug use before test sessions. At session outset, breath and urine samples will be obtained to verify a zero blood alcohol concentration (BAC), recent use of benzodiazepines, barbiturates, cannabis, cocaine, amphetamine, and opiates, and also to confirm that women are not pregnant. The alcohol dose consists of 0.60 g/kg absolute alcohol that produces a peak blood-alcohol concentration (BACs) of 80 mg/dl. The dose was chosen based on prior research showing that it elevates levels of reward and impairs inhibitory control in young women. We have extensive experience with this dose and its pharmacokinetics are well-known. Doses are mixed with a carbonated, non-caffeinated, lemon flavored soda and are consumed in 10 minutes. The placebo consists of 300 ml of lemon flavored soda with a small amount (i.e., 3 ml) of alcohol floated on the top of the beverage.

The test battery consists of measures of rewarding effects and alcohol effects on disinhibition and impulsive choice. The task battery is brief (30 minutes) to accommodate repeated testing and prevent fatigue. Also, its brief duration minimizes change in BAC during testing. Baseline measures of subjective reward and disinhibition/impulsivity will first be assessed at each test session. For baseline assessment, volunteers receive a placebo (non-alcoholic beverage) and then complete the test battery. Volunteers then receive the active dose and repeat the test battery at approximately 30 minutes after drinking when their ascending BAC reaches 60 mg/dl with the

task battery completed in 20 minutes when BAC reaches peak level (80 mg/dl). Assessments of subjective rewarding and other subjective effects will be taken 11 times at 30 minute intervals during the expected 6-hour time course of the active dose, as BAC ascends, peaks, and gradually declines to 0.02%. BAC is measured by breathalyzer at regular intervals throughout the session. Female participants in our studies show average BAC clearance rates between 17 and 20 mg/dl per hour. Based on these rates, we expect that all volunteers will reach 0.02% BAC between 300 and 360 minutes post alcohol administration. An Intoxilyzer SD-5 (CMI Inc.) will analyze breath samples at 15 minute intervals beginning 30 minutes after drinking onset. After testing is complete participants relax in a recreational setting until their BAC falls to 0.02%. They are also provided with a meal.

Attachments

Data Collection & Research Materials

In this section, please provide the following:

- Describe all sources or methods for obtaining research materials about or from living individuals (such as specimens, records, surveys, interviews, participant observation, etc.), and explain why this information is needed to conduct the study.
- For each source or method described, please list or attach all data to be collected (such as genetic information, interview scripts, survey tools, data collection forms for existing data, etc.).
- If you will conduct a record or chart review, list the beginning and end dates of the records you will view.

The research material consists of subjects' questionnaire scores, diagnostic test scores, urine analyses for drug metabolites and urine human chorionic gonadotrophin (pregnancy), and their scores on the laboratory tasks and visual analogue assessments. Drug metabolites tested for include: amphetamine and amphetamine salts (e.g., methylphenidate), barbiturates, benzodiazepines, cocaine, opiates, and tetrahydrocannabinol. Participants will also provide daily saliva samples to measure daily hormone levels. During the diagnostic visit volunteers provide a comprehensive medical and psychiatric history and body measurements are obtained (BMI) at this visit. A comprehensive evaluation of participants' drinking patterns is also conducted using the Timeline Follow-Back, Personal Drinking Habits Questionnaire (PDHQ), and the Alcohol Use Disorders Identification Test (AUDIT). Participants also complete the Adult Self Report (ASR) Psychopathological Comorbid Problems, a broadband, reliable and valid, behavioral rating scale that provides an empirical assessment of emotional and behavioral problems in adults ages 18-59 years. Participants also complete a well-established clinical diagnostic intervention (SCID, DSM-5). Subjective rewarding effects of alcohol will be assessed by participant's attentional bias towards alcohol-related cues and by their subjective ratings of the rewarding effects of alcohol. Attentional bias is measured by the visual dot-probe task and provides an implicit assessment of the rewarding properties of alcohol as indicated by the degree to which an acute dose of alcohol increases the drinker's attention to alcohol cues, a component of alcohol-seeking behavior. Disinhibition will be measured by the cued go/no-go task. The task requires volunteers to respond quickly to go targets and inhibit responses to no-go targets.

Attachments

Attach Type	File Name
DataCollection	AUDIT questionnaire.pdf
DataCollection	Personal Drinking Habits Questionnaire.pdf
DataCollection	Time-line Follow-back Drinking Assessment.pdf
DataCollection	medical history.docx
DataCollection	SCID.pdf
DataCollection	ASR adult self report.pdf

Resources

Describe the availability of the resources and adequacy of the facilities that you will use to perform the research. Such resources may include:

- Staffing and personnel, in terms of availability, number, expertise, and experience;
- Computer or other technological resources, mobile or otherwise, required or created during the conduct of the research;
- Psychological, social, or medical services, including equipment needed to protect subjects, medical monitoring, ancillary care, or counseling or social support services that may be required because of research participation;
- Resources for communication with subjects, such as language translation/interpretation services.

The study team consists of five investigators: the two principal investigators, Drs. Mark Fillmore and Michelle Martel, the co-investigators, Drs. Curry and Hays, and the consultant, Dr. Eisenlohr-Moul. This multi-PI approach is ideally suited to the dual-design approach that integrates controlled laboratory analysis of women's acute behavioral sensitivity to alcohol effects (MPI Fillmore) with longitudinal and ecological assessment of hormonal fluctuation in relation to their drinking behavior (MPI Martel). The result is unique and innovative integration of expertise and resources among the investigative team that will advance our understanding of the behavioral mechanisms by which hormonal fluctuation can alter the abuse potential of alcohol across the menstrual cycle. The PIs Fillmore and Martel are responsible for coordinating all research activities among the co-investigators. Drs. Fillmore and Martel will oversee all aspects of this project, including administrative duties, research design, implementation, adherence with all regulatory standards, and interpretation and publication of results. Dr. Fillmore will also serve as the NIH contact PI, will assume overall fiscal and administration management, and will be responsible for all communication with NIH including submission of annual progress reports. Dr. Fillmore will supervise subject recruitment and screening efforts, behavioral task development and assessment, alcohol administration protocols, and behavioral data analysis. In collaboration with the study physician (Co-I Hays), Dr. Fillmore will assume overall fiscal and administration management for the project, will obtain the necessary regulatory approvals, and will also serve as the

primary contact with NIAAA. Dr. Martel will direct the longitudinal assessments and analyses of women's hormonal fluctuation and daily drinking patterns, including oversight of the integrity and reliability of data collection protocols and data analysis. Dr. Martel will train and supervise technical assistants who are involved in hormonal assays and ecological assessments of drinking patterns and other drug use. Drs. Fillmore and Martel will jointly participate in disseminating research results at scientific conferences and manuscript and grant preparation from data arising from this project. Due to the intensive nature of 35 longitudinal days of data collection and scheduling of laboratory cognitive visits based on individualized information about participant cycle phase, there will be a project coordinator. The project coordinator will coordinate all participant scheduling, follow-up, retention and preliminary data entry and management tasks. Her duties will include sending daily reminders, scheduling laboratory visits, mailing and emailing questionnaires, handling retention methods, including participant payment, data entry management and analysis, and communicating with all staff. Dr. Martel will train and supervise the project coordinator and coordinate these research activities with Dr. Fillmore's Alcohol Research Laboratory. Dr. Martel will also coordinate communications between key project personnel and non-project personnel who are essential to project completion.
Co-investigator Hays will provide medical supervision on the project and will oversee procedures for screening of potential subjects and safety of laboratory volunteers. Dr. Hays is Chair of the University's Psychiatry department, which will also provide 24 hour, on-call, medical consultation and support for the project. Dr. Hays will also assist in interpretation of findings and publication of results. Other team members include: Dr. Thomas Curry, an expert in hormonal mechanisms who will oversee hormonal assays. Consultant Dr. Eisenlohr-Moul is an expert in multilevel modeling of menstrual cycle and ovarian steroid effects on behavior. Publication authorship will be based on the relative scientific contributions of the PIs and key personnel.
Drs. Fillmore and Martel will meet with the co-investigators, at least monthly, to review research progress. Publication authorship will be based on the relative scientific contributions of the PIs and key personnel. With respect to recent collaboration, Drs. Martel and Fillmore have both independently and collaboratively worked with all three Co-Is. In addition, Drs. Fillmore and Martel have begun research collaboration on studies of acute alcohol effects showing heightened impairment of impulse control in high-risk populations, such as drinkers with ADHD. Drs. Fillmore and Martel also jointly serve on graduate research committees for studies on alcohol use disorders. Overall, the combined expertise of the MPI team is essential to the success of the project, and the likelihood of success is further strengthened by their existing collaborative relationship.
The project will be conducted at the University of Kentucky Psychology department with daily data collection completed through a secure internet site. PI Fillmore oversees the Alcohol Abuse Research facility at UK which consists of a suite of behavioral testing/monitoring rooms, a drug/alcohol preparation facility, a detoxification/recreation room, an interview/screening room, and additional office space for laboratory technicians and graduate student/post-doctoral researchers. The laboratory consists of 8 testing rooms equipped with computer-based equipment for measuring a variety of cognitive functions, memory, psychomotor coordination, simulated driving, eye-tracking, blood alcohol concentration testing equipment, and physiological monitoring equipment. PI Martel's laboratory suite is a few blocks away and consists of 2 individual interview and 2 laboratory testing rooms with a reception area and a state-of-the-art freezer for storing saliva samples. The PIs' offices are both located in the Psychology Department and are just a few blocks of one another and from the other University of Kentucky collaborators. Dr. Eisenlohr-Moul is off site, but has a history of collaboration with the PIs that has culminated in published work. Additional staff support in the department is extensive and flexible to need.

Potential Risks & Benefits

Risks

- Describe any potential risks – including physical, psychological, social, legal, ability to re-identify subjects, or other risks. Assess the seriousness and likelihood of each risk.
- Which risks may affect a subject's willingness to participate in the study?
- Describe likely adverse effects of drugs, biologics, devices or procedures participants may encounter while in the study.
- *Qualitative research* - describe ethical issues that could arise while conducting research in the field and strategies you may use to handle those situations.
- Describe any steps to mitigate these risks.

Benefits

- Describe potential direct benefits to study participants – including diagnostic or therapeutic, physical, psychological or emotional, learning benefits. This cannot include incentives or payments.
- State if there are no direct benefits.
- Describe potential benefits to society and/or general knowledge to be gained.

Describe why potential benefits are reasonable in relation to potential risks. If applicable, justify why risks to vulnerable subjects are reasonable to potential benefits.

The potential risks to participants are minimal owing to the safeguards in place. Participants will provide saliva samples, urine samples, and complete diagnostic rating scales and provide information regarding drinking which may be of a personal or sensitive nature. These questionnaires may also be long and tedious. Further, participants will complete measures for 35 days, which may be tedious, and will receive daily email reminders to complete these forms. They can discontinue as needed and are compensated for their time. No other risk is anticipated. These risks are clearly described to the participant verbally and in writing prior to consent.
With regard to risk related to the ingestion of alcohol, common side effects of the proposed dose of alcohol include mild fatigue 3-4 hours after administration. Vomiting is extremely unlikely given the moderate doses administered. The dose to be administered was chosen to minimize, if not eliminate, the chance of adverse effects. For an average weight women (i.e., 55 kg), the alcohol dose to be administered in the proposed study translates to the alcohol content of 3 standard drinks (e.g., beers). The doses are typically below what many women in this age range customarily consume (5 or more drinks). The PI (Fillmore) has administered doses of this range to over 5000 participants over the past 25 years without incident of serious adverse effects. No accidents or other adverse

consequences have ever occurred to participants who have received alcohol in the PI's laboratory. Dr. Lon Hays (M.D.) will provide medical consultation and 24 hour on-call support for all participants.
There is also the risk that a volunteer's Protected Health Information (PHI) may be seen by others. PHI is considered individually identifiable health information transmitted or maintained in any form (i.e., electronic means, on paper, or through oral communication) that relates to the past, present, or future physical or mental health conditions of an individual that may be used or disclosed. The following PHI will be collected as part of this project: names (individual, employer, relatives, etc.), address, telephone number, Social Security number, dates (birth, admission, discharge), medical record numbers, driver's license numbers, mental and physical health history, drug use history, results from mental and physical health screening, and data from experimental measures. All data will be coded by participant number only and any personal identifiers linking participants to their reports on questionnaires will be detached and destroyed as soon as participation is completed or disqualification occurs. In addition, the PIs will apply for a Certificate of Confidentiality under the authority of Section 301(d) of the Public Health Service Act [42 U.S.C. S 241 (d)], in order to protect against involuntary disclosure of the identities of research subjects participating in research.
Participants will be paid $300 for complete data collection which includes $50 for each of the two laboratory testing sessions and $200 for completing the daily reports and sample collections over the 35-day period. No other personal benefits are foreseen. Participants who are unable to provide complete data will receive prorated stipends. These modest inducements represent reasonable compensation for time spent in the study and cannot be considered coercive. More importantly, participants in the research derive considerable educational benefit from their participation. Subjects are genuinely interested in studies of alcohol and have many questions about how the drug may affect them. The feedback to participants includes written educational information about blood alcohol levels and the risks of impairment likely to result from drinking various amounts of alcohol. Participants in our studies often comment that this information is extremely helpful in judging the safety of their drinking practices and deciding about activities, such as driving after drinking. Given the potential educational benefits that subjects derive from participating in this research, the minimal risk to subjects in this research is reasonable. It is expected that these benefits will outweigh the minimal risks described above.

Available Alternative Opportunities/Treatments

Describe alternative treatments or opportunities that might be available to those who choose not to participate in the study, and which offer the subject equal or greater advantages. If applicable, this should include a discussion of the current standard of care treatment(s).

There are no alternative treatments.

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Records, Privacy, and Confidentiality

Specify where the data and/or specimens will be stored and how the researcher will ensure the privacy and confidentiality of both. Specify who will have access to the data/specimens and why they need access.

Describe how data will be managed after the study is complete:

- If data/specimens will be maintained, specify whether identifiers will be removed from the maintained information/material.
- If identifiers will not be removed, provide justification for retaining them and describe how you will protect confidentiality.
- If the data/specimens will be destroyed, verify that this will not violate retention policies and will adhere to applicable facility requirements.

If this study will use de-identified data from another source, describe what measures will be taken to ensure that subject identifiers are not given to the investigator.

If applicable, describe procedures for sharing data/specimens with collaborators not affiliated with UK.

For additional considerations:
Return of Research Results or Incidental Research Findings
HIPAA policies
FERPA policies
Procedures for Transfer agreements
Information regarding multi-site studies
NIH Genomic Data Sharing (GDS) Policy
Digital Data

The research material consists of subjects' questionnaire scores, diagnostic test scores, urine analyses for drug metabolites and urine human chorionic gonadotrophin (pregnancy), and their scores on the laboratory tasks and visual analogue assessments. Drug metabolites tested for include: amphetamine and amphetamine salts (e.g., methylphenidate), barbiturates, benzodiazepines, cocaine, opiates, and tetrahydrocannabinol. Participants will also provide daily saliva samples to measure daily hormone levels. All data will be coded by participant number only and any personal identifiers linking participants to their reports on questionnaires will be detached and destroyed as soon as participation is completed or disqualification occurs. In addition, the PIs will apply for a Certificate of Confidentiality under the authority of Section 301(d) of the Public Health Service Act [42 U.S.C. S 241 (d)], in order to protect against involuntary disclosure of the identities of research subjects participating in research.
For the daily assessment of hormonal levels, ovulation, and drinking behavior, several procedures and quality control checks will be implemented to ensure rigorous and reliable data collection. These include daily monitoring of subjects' reporting on the collection/storage of saliva samples, drinking patterns, and urinary ovulation tests. Data is transferred via secure website that time- and

date-stamps data so accuracy of data collection can be monitored. Data from experimental sessions will be collected using a computerized data collection and management system. All data are stored in a unique file on the hard-drive of the computer and are electronically backed-up at the end of each session. In all instances, the data files do not contain the name of the subject; but instead, each subject is identified by a unique four-digit number. The computer file linking subject names and numbers will be encrypted and only investigators will have access. Data files for experimental tasks from each experimental session will be managed and combined into a single electronic spreadsheet by automated macros. Data will then be combined into a single electronic spreadsheet and separated by experimental measure for statistical analysis using SPSS® (Statistical Package for the Social Sciences) software. The quality of manipulated data and data analyses will be monitored by random inspection by the investigative team/key personnel. Preprocessing and analysis of subject-specific behavior profiles will begin as individual data are collected. Interim analysis of group data will begin once 25% of the sample is accrued. All data will be coded by participant number only and any personal identifiers linking participants to their reports on questionnaires will be detached and destroyed as soon as participation is completed or disqualification occurs. In addition, the PIs will apply for a Certificate of Confidentiality under the authority of Section 301(d) of the Public Health Service Act [42 U.S.C. S 241 (d)], in order to protect against involuntary disclosure of the identities of research subjects participating in research. The urine samples collected during laboratory testing will be analyzed immediately and destroyed immediately by flushing. The saliva samples will be stored in a locked -80 degree freezer. Following the end of data collection, saliva samples are sent in bulk to the Center for Clinical and Translational Science (CCTS) on the University of Kentucky campus for at-cost assay. Following the assaying, all saliva samples will be stored in a -80 degree freezer for two years after study completion before they are destroyed, the CCTS will destroy all samples after the 2 year period. All information or samples collected for this study will NOT be used or shared for future research studies.

Participants can discontinue at any point during data collection. Participants are informed they can discontinue or skip items without repercussions. If discomfort arises, study staff or the MPIs will debrief the participant accordingly. Confidentiality of data will be strictly maintained by recording all data according to subject number without names. The identification key will be kept on a password-protected computer with a backup on a flashdisk that is kept in a locked file cabinet in an office separate from the data. Participants will sign in online using this identification code to complete online daily surveys using Qualtrics©. Qualtrics© assures that all data is kept secure on their servers which are protected by high-end firewall systems and on which vulnerability scans are reported to be performed regularly. They also ensure that complete penetration tests are performed annually. Qualtrics© reports that they utilize Transport Layer Security (TLS) encryption, protect surveys with passwords and HTTP referrer checking, and meet or exceed minimum federal security requirements for data storage. The project coordinator and study personnel are carefully trained by the PI to maintain confidentiality and protect privacy of participants at all times, including not removing participant data from the lab and not discussing interviews or clinical material outside of the laboratory. Saliva samples will be stored in participant's home freezers until returned to the laboratory in coolers after which time they will be stored in a locked freezer by an identification number, and not by name. These samples will then be transported to CCTS for assaying procedure. CCTS will only receive these identification numbers and will not be privy to other information about participants. All staff working on the project will complete on an annual basis the NIH on-line course on the protection of human subjects. Several procedures are taken to ensure safety the of the alcohol administration protocols.

i) Subject Screening. The intake screens out individuals who: 1) have a medical condition contraindicating alcohol use; 2) have a substance abuse history (with the exception of nicotine); 3) are pregnant; 4) are alcohol abstainers; 5) are minors (under 21), 6) present to any session with a non-zero blood alcohol level prior to study, 7) present to any session urine-positive for benzodiazepines, barbiturates, tetrahydrocannabinol, cocaine, methylphenidate, amphetamine, or opiates; 8) present to any session with impaired field sobriety test performance; 9) have a body mass index of 30 or above. Subject screening is also ongoing throughout the study. Prior to each test session, participants are re-screened for recent drug or alcohol use, pregnancy, and general health status. Participants also must pass a standard field sobriety test prior to each session and once again prior to release from the session. The field sobriety test consists of the walk and turn, the one-leg balance (timed), the Romberg balance, and the finger-to-nose tasks. Performance on this battery prior to alcohol administration is designed to ensure the absence of any performance impairment prior to the session and to serve as a pre-alcohol baseline from which to compare performance on the same battery at the end of the day during release assessment. If alcohol effects are evident at the end of the experimental session, subjects will remain at the testing facility until these effects dissipate. Previous research indicates that by comparing pre- and post-alcohol performance on the experimental tasks and the field sobriety test, subtle levels of impairment can be detected.

ii) Alcohol Dose. The dose of alcohol to be administered in the proposed research has been administered safely to human volunteers under controlled-laboratory conditions. The dose level was selected to balance effects and side effects. We anticipate that careful volunteer selection, dose selection, and volunteer monitoring will greatly reduce, if not eliminate, the occurrence of serious adverse effects. A longstanding objective of the PI is to employ sensitive behavioral measures that can detect effects of low alcohol doses. The alcohol dose administered is 0.60 g/kg alcohol which, for a women under 30 years old of average weight (55 kg), represents the alcohol content of 3-4 beers and produces a mean peak BAC of 80 mg/dl (0.08%), which is below the legal limit used to prosecute for impaired driving. Moreover, the dose is typical of what many adults customarily consume and has been administered to volunteers in the PI Fillmore's laboratory for over two decades without ill effects (e.g., nausea or vomiting). The PI Fillmore has tested over 5000 participants in alcohol studies and no accidents or other adverse consequences have ever occurred to participants who have received alcohol in his laboratory. All volunteers will be thoroughly informed of the various adverse effects which they might experience and will be appropriately cautioned concerning their activities in the hours after study participation. Since participation is voluntary, volunteers can withdraw at any time if they find the behavioral procedures or alcohol effects undesirable. The research team has extensive experience conducting inpatient and outpatient human behavioral pharmacology studies with healthy volunteers, DUI offenders, those with ADHD, and volunteers with histories of drug abuse, and we have never observed a serious adverse effect.

iii) Behavioral Testing and Laboratory Environment. During the course of participation in the research, a subject could experience dissatisfaction or discomfort with the experimental procedures. Because participation is voluntary, subjects can withdraw at any time if they find the research procedures or alcohol effects undesirable. A research staff member will be immediately available to address these issues and the study subjects have telephone contact information to reach the study investigators and the study physician. In addition, if individuals become overly distressed or distraught, participation in the study will be discontinued immediately and private consultation with an investigator and/or the study physician will be offered. All subjects are invited and encouraged to attend a private debriefing and exit interview with an investigator during which the details of the study are reviewed and exit interview questions about the subject's experiences in the study are discussed (e.g., usefulness and completeness of the information provided during recruitment and training and comfort and satisfaction with study participation). Procedures are in place for potential discovery of abuse

or other actionable information (such as abuse or suicidal ideation). The project coordinator and study personnel have received extensive training in risk assessment and guidelines for reporting abuse or other actionable information. Further, MPI Martel is a licensed Clinical Psychologist in the state of Kentucky so she is familiar with regulations concerning duty to report standard reporting procedures. The PIs and study physician will always be available for consultation on-site or on the telephone as needed. Treatment referrals may also be offered at this time. Protocol management forms will include prompts for research staff members to record any protocol anomalies, data collection problems, concerns with study subjects, or any unusual events that could impact the safety of the subjects or the integrity of the protocol. Furthermore, investigators will meet with the project staff on a daily basis in the laboratory or by telephone contact to review the study activities. Participants remain in the laboratory area during the alcohol testing and do not engage in strenuous or hazardous activity. The Behavioral Pharmacology Research Laboratory is equipped with first-aid services and is located less than 0.25 miles from the University's Medical Center and Emergency treatment center. Dr. Hays, the study physician, specializes in addiction psychiatry and provides medical consultation for the project and 24 hour on-call support from the Psychiatry Department. All laboratory technicians have completed the training course on Human Subjects Protection and are CPR and first-aid certified annually.
iv) Detoxification/Debriefing. BACs must fall to 0.02% (20 mg/dl) before volunteers can leave the laboratory after a session. This is in accordance with guidelines on alcohol administration in human experimentation as recommended by the National Advisory Council on Alcohol Abuse and Alcoholism (U.S. Department of Health and Human Services). BACs are determined by breathalyzers that are calibrated to a factory standard every two weeks and are serviced and maintained annually by the CMI Breath Analyzer Instruments Inc. Volunteers also must pass a field sobriety test and sign a release form indicating that they have been informed of their BAC and that they agree not to drive. Volunteers receiving alcohol are provided with transportation to and from each session by taxi. They are told not to drive or operate heavy machinery until the following morning. During the detoxification, period subjects' comfort is a priority. They receive a hot meal and nonalcoholic beverages in a lounge where they can read or watch movies.

UK IRB policies state that IRB-related research records must be retained for a minimum of 6 years after study closure. Do you confirm that you will retain all IRB-related records for a minimum of 6 years after study closure?

◉ Yes ○ No

Payment

Describe the incentives (monetary or other) being offered to subjects for their participation. If monetary compensation is offered, indicate the amount and describe the terms and schedule of payment. Please review this guidance for more information on payments to subjects, including restrictions and expectations.

Participants will be paid up to $440 for complete data collection which includes $70 for each of the two laboratory testing sessions, $200 for completing the daily reports and sample collections over the 35-day period, and a $100 completion bonus for completing both alcohol sessions. Participants will lose $5 for every missed survey.

Costs to Subjects

Include a list of services and/or tests that will not be paid for by the sponsor and/or the study (e.g., MRI, HIV). Keep in mind that a subject will not know what is "standard" – and thus not covered by the sponsor/study – unless you tell them.

There are no anticipated costs to subjects

Data and Safety Monitoring

The IRB requires review and approval of data and safety monitoring plans for greater than minimal risk research or NIH-funded/FDA-regulated clinical investigations.

- If you are conducting greater than minimal risk research, or your clinical investigation is NIH-funded, describe your Data and Safety Monitoring Plan (DSMP). Click here for additional guidance on developing a Data and Safety Monitoring Plan.
- If this is a non-sponsored investigator-initiated protocol considered greater than minimal risk research, and if you are planning on using a Data and Safety Monitoring Board (DSMB) as part of your DSMP, click here for additional guidance for information to include with your IRB application.

Drs. Fillmore and Martel will be responsible for monitoring the safety of the study, executing the DSMP, and complying with the reporting requirements. PI Fillmore will provide a summary of the DSM report for NIAAA as part of the annual progress report. The DSM report will include the subject sociodemographic characteristics, expected versus actual recruitment rates, retention rates, any quality assurance or regulatory issues that occurred during the past year, summary of serious adverse events (SAEs), and any substantial actions or changes with respect to the protocol. The DSM report will also include, if applicable, the results of any data analysis conducted.
Data Monitoring Plan:
For the daily assessment of hormonal levels, ovulation, and drinking behavior, several procedures and quality control checks will be implemented to ensure rigorous and reliable data collection. These include daily monitoring of subjects' reporting on the collection/storage of saliva samples, drinking patterns, and urinary ovulation tests. Data is transferred via secure website that time- and date-stamps data so accuracy of data collection can be monitored. Data from experimental sessions will be collected using a computerized data collection and management system. All data are stored in a unique file on the hard-drive of the computer and are electronically backed-up at the end of each session. In all instances, the data files do not contain the name of the subject; but instead,

each subject is identified by a unique four-digit number. The computer file linking subject names and numbers will be encrypted and only investigators will have access. Data files for experimental tasks from each experimental session will be managed and combined into a single electronic spreadsheet by automated macros. Data will then be combined into a single electronic spreadsheet and separated by experimental measure for statistical analysis using SPSS® (Statistical Package for the Social Sciences) software. The quality of manipulated data and data analyses will be monitored by random inspection by the investigative team/key personnel. Preprocessing and analysis of subject-specific behavior profiles will begin as individual data are collected. Interim analysis of group data will begin once 25% of the sample is accrued.
Safety Monitoring Plan:
Potential subjects will provide information regarding their alcohol and other drug use and medical history to determine their eligibility and the safety of their participation. Individuals with past or current serious physical or mental health conditions are contraindicated for study participation. Subjects must not be nursing, and must test negative for pregnancy prior to each experimental session. Potential subjects who report regular use of any psychotropic medication will be excluded. Methods for monitoring adverse events (AEs) will include observations by research staff, spontaneous report by the subjects, regular measurement of subjective-effects and performance on experimental tasks. All AEs occurring during the course of the study will be collected, documented, and reported to the investigators and the study physician following each occurrence. The occurrence of AEs will be assessed daily for the duration of participation and as needed in follow-up visits as appropriate. The investigators and study physician will follow all AEs to the point of a satisfactory resolution. Subjects may be withdrawn from the study if the investigators determine it is the best decision in order to protect the safety of the subject. All AEs will be assessed to determine if they meet criteria for a serious adverse event (SAE). SAEs, as defined by the FDA, will be systematically evaluated daily for the duration of participation and as needed in follow-up visits as appropriate. Any SAE will be reported to the IRB and NIAAA. In the event that a subject either withdraws from the study or the investigator decides to discontinue a subject due to an SAE, the subject will have appropriate follow-up medical monitoring. A summary of the SAEs that occurred during the previous year will be included in the annual progress report to NIAAA.

Data and Safety Monitoring Board:
NIH requires the establishment of a Data and Safety Monitoring Board (DSMB) for 1) multi-site clinical trials involving interventions that entail risk to the participants and 2) for most Phase III clinical trials. This project meets neither of these definitions and therefore, a DSMB is not required and will not be utilized.

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Future Use and Sharing of Material (e.g., Data/Specimens/Information)

If the material collected for this study will be used by members of the research team or shared with other researchers for future studies, please address the following:

- list the biological specimens and/or information that will be kept
- briefly describe the types, categories and/or purposes of the future research
- describe any risks of the additional use
- describe privacy/confidentiality protections that will be put into place
- describe the period of time specimens/information may be used
- describe procedures for sharing specimens/information with secondary researchers
- describe the process for, and limitations to, withdrawal of specimens/data

N/A

Are you recruiting or expect to enroll **Non-English Speaking Subjects or Subjects from a Foreign Culture**? (does not include short form use for incidentally encountered non-English subjects)
○ Yes ◉ No

Non-English Speaking Subjects or Subjects from a Foreign Culture

Recruitment and Consent:

Describe how information about the study will be communicated to potential subjects appropriate for their culture, and if necessary, how new information about the research may be relayed to subjects during the study.
When recruiting Non-English-speaking subjects, provide a consent document in the subject's primary language. After saving this section, attach both the English and translated consent documents in the "Informed Consent" section.

Cultural and Language Consultants:

The PI is required to identify someone who is willing to serve as the cultural consultant to the IRB.

- This person should be familiar with the culture of the subject population and/or be able to verify that translated documents are the equivalent of the English version of documents submitted.
- The consultant should not be involved with the study or have any interest in its IRB approval.
- Please include the name, address, telephone number, and email of the person who agrees to be the cultural consultant for your study.
- ORI staff will facilitate the review process with your consultant. Please do not ask them to review your protocol separately.

For more details, see the IRB Application Instructions on Research Involving Non-English Speaking Subjects or Subjects from a Foreign Culture.

Local Requirements:

If you will conduct research at an international location, identify and describe:

- relevant local regulations
- data privacy regulations
- applicable laws
- ethics review requirements for human subject protection

Please provide links or sources where possible. If the project has been or will be reviewed by a local ethics review board, attach a copy in the “Additional Information/Materials” section. You may also consult the current edition of the International Compilation of Human Research Standards

Does your study involve **HIV/AIDS research and/or screening for other reportable diseases (e.g., Hepatitis C, etc…)**?
○ Yes ◉ No

HIV/AIDS Research

If you have questions about what constitutes a reportable disease and/or condition in the state of Kentucky, see ORI's summary sheet: "Reporting Requirements for Diseases and Conditions in Kentucky" [PDF].

HIV/AIDS Research: There are additional IRB requirements for designing and implementing the research and for obtaining informed consent. Describe additional safeguards to minimize risk to subjects in the space provided below.

For additional information, visit the online IRB Survival Handbook to download a copy of the "Medical IRB's requirements for Protection of Human Subjects in Research Involving HIV Testing" [D65.0000] [PDF], and visit the Office for Human Research Protections web site for statements on AIDS research, or contact the Office of Research Integrity at 859-257-9428.

PI-Sponsored FDA-Regulated Research

Is this an investigator-initiated study that:

1) involves testing a Nonsignificant Risk (NSR) Device, or
2) is being conducted under an investigator-held Investigational New Drug (IND) or Investigational Device Exemption (IDE)?
○ Yes ◉ No

PI-Sponsored FDA-Regulated Research

If the answer above is yes, then the investigator assumes the regulatory responsibilities of both the investigator and sponsor. The Office of Research Integrity provides a summary list of sponsor IND regulatory requirements for drug trials [PDF], IDE regulatory requirements for SR device trials [PDF], and abbreviated regulatory requirements for NSR device trials [PDF]. For detailed descriptions see FDA Responsibilities for Device Study Sponsors or FDA Responsibilities for IND Drug Study Sponsor-Investigators.

- Describe the experience/knowledge/training (if any) of the investigator serving as a sponsor (e.g., previously held an IND/IDE); and
- Indicate if any sponsor obligations have been transferred to a commercial sponsor, contract research organization (CRO), contract monitor, or other entity (provide details or attach FDA 1571).

IRB policy requires mandatory training for all investigators who are also FDA-regulated sponsors (see Sponsor-Investigator FAQs). A sponsor-investigator must complete the applicable Office of Research Integrity web based training, (drug or device) before final IRB approval is granted.

Has the sponsor-investigator completed the mandatory PI-sponsor training prior to this submission?
○ Yes ○ No

If the sponsor-investigator has completed equivalent sponsor-investigator training, submit documentation of the content for the IRB's consideration.

Attachments

HIPAA

0 unresolved comment(s)

Is HIPAA applicable? ○ Yes ◉ No

(Visit ORI's Health Insurance Portability and Accountability Act (HIPAA) web page to determine if your research falls under the HIPAA Privacy Regulation.)

If yes, check below all that apply and attach the applicable document(s):

- ☐ HIPAA De-identification Certification Form
- ☐ HIPAA Waiver of Authorization

Attachments

STUDY DRUG INFORMATION

0 unresolved comment(s)

The term drug may include:

- FDA approved drugs,
- unapproved use of approved drugs,
- investigational drugs or biologics,
- other compounds or products intended to affect structure or function of the body, and/or
- complementary and alternative medicine products such as dietary supplements, substances generally recognized as safe (GRAS) when used to diagnose, cure mitigate, treat or prevent disease, or clinical studies of e-cigarettes examining a potential therapeutic purpose.

Does this protocol involve a drug including an FDA approved drug; unapproved use of an FDA approved drug; and/or an investigational drug?

○ Yes ◉ No

If yes, complete the questions below. Additional study drug guidance.

LIST EACH DRUG INVOLVED IN STUDY IN THE SPACE BELOW

Drug Name:

Note: Inpatient studies are required by Hospital Policy to utilize Investigational Drug Service (IDS) pharmacies (Oncology or Non-Oncology). Use of IDS is highly recommended, but optional for outpatient studies. Outpatient studies not using IDS services are subject to periodic inspection by the IDS for compliance with drug accountability good clinical practices.

Indicate where study drug(s) will be housed and managed:

☐ Investigational Drug Service (IDS) UK Hospital

Other Location:

Is the study being conducted under a valid Investigational New Drug (IND) application?

○ Yes ○ No

If Yes, list IND #(s) and complete the following:

IND Submitted/Held by:

Sponsor: ☐	Held By:	
Investigator: ☐	Held By:	
Other: ☐	Held By:	

☐ Checkmark if the study is being conducted under FDA's Expanded Access Program (e.g., Treatment IND) or if this is an Individual Patient Expanded Access IND (FDA Form 3926).

FDA's Expanded Access Program Information for Individual Patient Expanded Access INDs, and attach the following:

- FDA Form 3926;
- FDA expanded access approval or correspondence;
- Confirmation of agreement from manufacturer or entity authorized to provide access to the product.

For guidance and reporting requirements at the conclusion of treatment see the Expanded Access SOP.

Complete and attach the required Study Drug Form picking "Study Drug Form" for the document type. Any

applicable drug documentation (e.g., Investigator Brochure; approved labeling; publication; FDA correspondence, etc.) should be attached using "Other Drug Documentation" for the document type.

Attachments

STUDY DEVICE INFORMATION

0 unresolved comment(s)

A DEVICE may be a:

- component, part, accessory;
- assay, reagent, or in-vitro diagnostic device;
- software, digital health, or mobile medical app;
- other instrument if intended to affect the structure or function of the body, diagnose, cure, mitigate, treat or prevent disease; or
- a homemade device developed by an investigator or other non-commercial entity and not approved for marketing by FDA.

For additional information, helpful resources, and definitions, see ORI's Use of Any Device Being Tested in Research web page.

Does this protocol involve testing (collecting safety or efficacy data) of a medical device including an FDA approved device, unapproved use of an approved device, humanitarian use device, and/or an investigational device?

○ Yes ◉ No

[Note: If a marketed device(s) is only being used to elicit or measure a physiologic response or clinical outcome, AND, NO data will be collected on or about the device itself, you may answer “no” above, save and exit this section, (Examples: a chemo drug study uses an MRI to measure tumor growth but does NOT assess how effective the MRI is at making the measurement; an exercise study uses a heart monitor to measure athletic performance but no safety or efficacy information will be collected about the device itself, nor will the data collected be used for comparative purposes against any other similar device).]

If you answered yes above, please complete the following questions.

LIST EACH DEVICE BEING TESTED IN STUDY IN THE SPACE BELOW

Device Name:

Is the study being conducted under a valid Investigational Device Exemption (IDE), Humanitarian Device Exemption (HDE) or Compassionate Use?

○ Yes ○ No

If Yes, complete the following:
IDE or HDE #(s)

IDE/HDE Submitted/Held by:

Sponsor: ☐ Held By:

Investigator: ☐ Held By:

Other: ☐ Held By:

☐ Check if this is a Treatment IDE or Compassionate Use under the Food and Drug Administration (FDA) Expanded Access program.

For Individual or Small Group Expanded Access, see FDA's Early Expanded Access Program Information, and attach the following:

- FDA expanded access approval or sponsor’s authorization;
- An independent assessment from an uninvolved physician, if available;
- Confirmation of agreement from manufacturer or entity authorized to provide access to the product.

For guidance and reporting requirements at the conclusion of treatment see the Medical Device SOP.

Does the intended use of any research device being tested (not clinically observed) in this study meet the regulatory definition of Significant Risk (SR) device?

- Yes. Device(s) being tested in this study presents a potential for serious risk to the health, safety, or welfare of a subject and (1) is intended as an implant; or (2) is used in supporting or sustaining human life; or (3) is of substantial importance in diagnosing, curing, mitigating or treating disease, or otherwise prevents impairment of human health; or (4) otherwise presents a potential for serious risk to the health, safety, or welfare of a subject.
- No. All devices being tested in this study do not present a potential for serious risk to the health, safety, or welfare of subjects/participants.

Complete and attach the required Study Device Form, picking the "Study Device Form" for the document type. Any applicable device documentation (e.g., Manufacturer information; patient information packet; approved labeling; FDA correspondence, etc.) should be attached using "Other Device Documentation" for the document type.

Attachments

RESEARCH SITES

0 unresolved comment(s)

To complete this section, ensure the responses are accurate then click "SAVE".

A) Check all the applicable sites listed below at which the research will be conducted. If none apply, you do not need to check any boxes.

UK Sites

- ☑ UK Classroom(s)/Lab(s)
- ☐ UK Clinics in Lexington
- ☐ UK Clinics outside of Lexington
- ☐ UK Healthcare Good Samaritan Hospital
- ☐ UK Hospital

Schools/Education Institutions

- ☐ Fayette Co. School Systems *
- ☐ Other State/Regional School Systems
- ☐ Institutions of Higher Education (other than UK)

***Fayette Co. School systems, as well as other non-UK sites, have additional requirements that must be addressed. See ORI's IRB Application Instructions - Off-site Research web page for details.**

Other Medical Facilities

- ☐ Bluegrass Regional Mental Health Retardation Board
- ☐ Cardinal Hill Hospital
- ☐ Eastern State Hospital
- ☐ Norton Healthcare
- ☐ Nursing Homes
- ☐ Shriner's Children's Hospital
- ☐ Veterans Affairs Medical Center
- ☐ Other Hospitals and Med. Centers

- ☐ Correctional Facilities
- ☐ Home Health Agencies
- ☐ International Sites

Research activities conducted at performance sites that are not owned or operated by the University of Kentucky (UK) or at sites that do not fall under the UK IRB's authority, are subject to special procedures for coordination of research review. Additional information is required (see IRB Application Instructions - Off-Site Research web page), including:

- A letter of support and local context is required from non-UK sites. See *Letters of Support and Local Context* on the IRB Application Instructions - Off-Site Research web page for more information.
- Supportive documentation, including letters of support, can be attached below.
- NOTE: If the non-UK sites or non-UK personnel are engaged in the research, there are additional federal and university requirements which need to be completed for their participation. For instance, the other site(s) may need to complete their own IRB review, or a cooperative review arrangement may need to be established with non-UK sites.

- Questions about the participation of non-UK sites/personnel should be discussed with the ORI staff at (859) 257-9428.

List all other non-UK owned/operated locations where the research will be conducted:

n/a

Describe the role of any non-UK site(s) or non-UK personnel who will be participating in your research.

n/a

Attachments

B) Is this a multi-site study for which **you are the lead investigator or UK is the lead site**? ○ Yes ◉ No

If YES, describe the plan for the management of reporting unanticipated problems, noncompliance, and submission of protocol modifications and interim results from the non-UK sites:

C) If your research involves collaboration with any sites and/or personnel outside the University of Kentucky, then it is considered multisite research and IRB reliance issues will need to be addressed. This may include national multi-center trials as well local studies involving sites/personnel external to UK. If you would like to request that the University of Kentucky IRB (UK IRB) serve as the lead IRB for your study, or if you would like the UK IRB to defer review to another IRB, please contact the IRBReliance@uky.edu.

RESEARCH ATTRIBUTES

0 unresolved comment(s)

Indicate the items below that apply to your research. Depending on the items applicable to your research, you may be required to complete additional forms or meet additional requirements. Contact the ORI (859-257-9428) if you have questions about additional requirements.

☐ Not applicable

Check All That Apply

	For additional requirements and information:
☐ Academic Degree/Required Research	
☑ Alcohol/Drug/Substance Abuse Research	• Cancer Research (MCC PRMC) • Certificate of Confidentiality (look up "Confidentiality/Privacy...") • CCTS (Center for Clinical and Translational Science) • Clinical Research (look up "What is the definition of....) • Clinical Trial • Collection of Biological Specimens for Banking (look up "Specimen/Tissue Collection...") • Collection of Biological Specimens (look up "Specimen/Tissue Collection...") • Community-Based Participatory Research (look up "Community-Engaged...") • Data & Safety Monitoring Board (DSMB) *For Medical IRB: Service Request Form for CCTS DSMB • Data & Safety Monitoring Plan • Deception* *For deception research, also go to the E-IRB Application Informed Consent section, checkmark and complete "Request for Waiver of Informed Consent Process" • Emergency Use (Single Patient) [attach Emergency Use Checklist] (PDF) • Genetic Research (look up "Specimen/Tissue Collection...") • Gene Transfer • HIV/AIDS Research (look up "Reportable Diseases/Conditions") • Screening for Reportable Diseases [E2.0000] (PDF) • International Research (look up "International & Non-English Speaking") • NIH Genomic Data Sharing (GDS) Policy (PDF) • Planned Emergency Research Involving Waiver of Informed Consent* *For Planned Emergency Research Involving Waiver of Informed Consent, also go to the E-IRB Application Informed Consent section, checkmark and complete "Request for Waiver of Informed Consent Process" • Use, storage and disposal of radioactive material and radiation producing devices
☑ CCTS-Center for Clinical & Translational Science	
☑ Certificate of Confidentiality	
☐ Clinical Research	
☐ Clinical Trial - Phase 1	
☐ Clinical Trial	
☐ Collection of Biological Specimens for internal banking and use (not sharing)	
☐ Community-Based Participatory Research	
☐ Deception	
☐ Educational/Student Records (e.g., GPA, test scores)	
☐ Emergency Use (Single Patient)	
☐ Gene Transfer	
☐ Genetic Research	
☐ GWAS (Genome-Wide Association Study) or NIH Genomic Data Sharing (GDS)	
☐ Human Cells, Tissues, and Cellular and Tissue Based Products	
☐ Individual Expanded Access or Compassionate Use	
☐ International Research	
☐ Planned Emergency Research Involving Exception from Informed Consent	
☐ Recombinant DNA	
☐ Registry or data repository creation	
☐ Stem Cell Research	
☐ Suicide Ideation or Behavior Research	
☐ Survey Research	
☐ Transplants	
☐ Use, storage and disposal of radioactive material and radiation producing devices	
☐ Vaccine Trials	

FUNDING/SUPPORT

0 unresolved comment(s)

If the research is being submitted to, supported by, or conducted in cooperation with an external or internal agency or funding program, indicate below all the categories that apply.

☐ Not applicable

Check All That Apply

- ☐ Grant application pending
- ☑ (HHS) Dept. of Health & Human Services
  - ☑ (NIH) National Institutes of Health
  - ☐ (CDC) Centers for Disease Control & Prevention
  - ☐ (HRSA) Health Resources and Services Administration
  - ☐ (SAMHSA) Substance Abuse and Mental Health Services Administration
- ☐ (DoJ) Department of Justice or Bureau of Prisons
- ☐ (DoE) Department of Energy
- ☐ (EPA) Environmental Protection Agency
- ☐ Federal Agencies Other Than Those Listed Here
- ☐ Industry (Other than Pharmaceutical Companies)
- ☐ Internal Grant Program w/ proposal
- ☐ Internal Grant Program w/o proposal
- ☐ National Science Foundation
- ☐ Other Institutions of Higher Education
- ☐ Pharmaceutical Company
- ☐ Private Foundation/Association
- ☐ U.S. Department of Education
- ☐ State

Click applicable listing(s) for additional requirements and information:

- (HHS) Dept. of Health & Human Services
- (NIH) National Institutes of Health
- (CDC) Centers for Disease Control & Prevention
- (HRSA) Health Resources & Services Administration
- (SAMHSA) Substance Abuse & Mental Health Services Administration
- Industry (Other than Pharmaceutical Companies) [IRB Fee Info]
- National Science Foundation
- (DoEd) U.S. Department of Education
- (DoJ) Department of Justice or Bureau of Prisons
- (DoE) Department of Energy Summary and Department of Energy Identifiable Information Compliance Checklist
- (EPA) Environmental Protection Agency

Other:

Specify the funding source and/or cooperating organization(s) (e.g., National Cancer Institute, Ford Foundation, Eli Lilly & Company, South Western Oncology Group, Bureau of Prisons, etc.):

NIAAA

Add Related Grants

If applicable, please search for and select the OSPA Account number or Electronic Internal Approval Form (eIAF) # (notif #) associated with this IRB application using the "Add Related Grants" button.
If required by your funding agency, upload your grant using the "Grant/Contract Attachments" button.

Add Related Grants

Grant/Contract Attachments

Attach Type	File Name
GrantContract	Grant.pdf
GrantContract	Estradiol NOA 2024-2025.pdf

The research involves use of Department of Defense (DoD) funding, military personnel, DoD facilities, or other DoD resources. (See DoD SOP and DoD Summary for details)

○ Yes ◉ No

Using the “attachments” button (below), attach applicable materials addressing the specific processes described in the DoD SOP.

DOD SOP Attachments

Additional Certification: (If your project is federally funded, your funding agency may request an Assurance/ Certification/Declaration of Exemption form.) Check the following if needed:

☐ Protection of Human Subjects Assurance/Certification/Declaration of Exemption (Formerly Optional Form – 310)

Assurance/Certification Attachments