Mechanisms Underlying Local and Systemic Effects of Massage

NCT04131712

R21AT010847

April 2024

PROTOCOL TYPE (VERSION 4)

Which IRB

◉ Medical ○ NonMedical

Protocol Process Type

○ Exemption
○ Expedited (Must be risk level 1)
◉ Full

IMPORTANT NOTE: You will not be able to change your selections for "Which IRB" and "Protocol Process Type" after saving this section. If you select the wrong IRB or Protocol Process Type, you may need to create a new application.

See below for guidance on these options, or refer to ORI's "Getting Started" page. Please contact the Office of Research Integrity (ORI) at 859-257-9428 with any questions prior to saving your selections.

Which IRB

The **Medical IRB** reviews research from the Colleges of:

- Dentistry
- Health Sciences
- Medicine
- Nursing
- Pharmacy and Health Sciences
- and Public Health.

The **Nonmedical IRB** reviews research from the Colleges of:

- Agriculture
- Arts and Sciences
- Business and Economics
- Communication and Information
- Design; Education
- Fine Arts
- Law
- and Social Work

Note: Studies that involve administration of drugs, testing safety or effectiveness of medical devices, or invasive medical procedures must be reviewed by the **Medical IRB** regardless of the college from which the application originates.

Which Protocol Process Type

Under federal regulations, the IRB can process an application to conduct research involving human subjects in one of three ways:

- by exemption certification
- by expedited review.
- by full review;

The investigator makes the preliminary determination of the type of review for which a study is eligible. Please refer to ORI's "Getting Started" page for more information about which activities are eligible for each type of review.

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

0 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

Attach Type	File Name
Entire Signed Consent Form	HuMA38 Consent.pdf
Entire Signed Consent Form	HuMA39 Consent.pdf

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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.**

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.

We have recorded one adverse event in the past 12 months that has not been reported to the IRB. This information has been included in the attached progress report as well as submitted as a separate AE and deviation submission to go along with this CR.

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

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:

140

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

9

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:

40

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

49

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

Attach Type	File Name
CR Data Safety Monitoring Doc	022823 DSMB LOCI - Massage II.pdf
CR Data Safety Monitoring Doc	DSMB Review 021523 Dupont Massage.pdf

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.

One subject was withdrawn by the PI due to the schedule of events not being able to be followed.

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
  - ☑ (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:

National Center for Complementary and Integrative Health (NCCIH)

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.

10. Project Information

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

06/30/2023

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.

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
Confides	Amy
Holbrook	Kathryn
Hommel	Leta
Rice	Linda
Watts	Linda
Chamblin	Lisa
Tillery	Melanie
Camper	Zenith
Kaenzig	Janet
Moylan	Jennifer
Biddle	Martha
True	Laura
Long	Douglas
Vincent	Sylvia
Elgumati	Sumya
Bowlds	Hannah
Cole	Jill
Butterfield	Timothy
Brown	Paul
Kern	Philip
DeCoster	Ryan
Bruns	Reva
Minix	Kathleen
Maynard	Marshall
Stiehler	Julie
Smith	Kayla
Buckler	Regan
Devine	Amber
Hunt	Emily
Gamble	Bethanie
Eisenhut	Sarah
Allman	Ariel
Finch	Megan
Mandal	Prabin
Memmini	Allyssa
Farrar	Nicholas
Swain	Audrie

Last Name	First Name
Van Pelt Jr	Douglas
Ross	James
Skaggs	Kylee
Forenback	Denece
Nieto	Alayne

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.

A progress report has been attached in additional materials.

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		1		
Black or African American		3		
Latinx	2	3		
Native Hawaiian or Other Pacific Islander				
White	12	26		
American Arab/Middle Eastern/North African				
Indigenous People Around the World				
More than One Race				
Unknown or Not Reported	1	1		

If unknown, please explain why:

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
- [x] 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.

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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).

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.

If applicable, submit one copy of the entire **signed HIPAA Authorization form** for the same last TWO subjects enrolled.

Attachments

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

The Cellular Effects of Massage of Human Skeletal Muscle Tissue

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.

Human Massage

Anticipated Ending Date of Research Project: 6/30/2024

Maximum number of human subjects (or records/specimens to be reviewed) 140

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

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:	Esther	Room# & Bldg:	204L CHARLES T WETHINGTON BLDG
Last Name:	Dupont-Versteegden	Speed Sort#:	405360200
Middle Name			
Department:	Health Sciences - Rehabilitati …	Dept Code:	7N600
PI's Employee/Student ID#:	10164584	Rank:	Professor
PI's Telephone #:	859323110080592	Degree:	Ph.D.
PI's e-mail address:	eedupo2@email.uky.edu	PI's FAX Number:	8593236003
PI is R.N.	○ Yes ◉ No	HSP Trained:	Yes
		HSP Trained Date:	12/30/2021
		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..) 18 yrs to 30 yrs

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

This study will include 70 subjects of either gender. Subjects will be randomly assigned to the following groups: (1) normal weight-bearing, massage (WB-M), (2) normal weight bearing, no massage (WB-C) (3) ULLS, no massage (U-C), and (4) ULLS, massage (U-M). Inclusion criteria are as follows: healthy subjects aged 18-30 years. Exclusion criteria include:
• BMI over 27
• Have current lower extremity musculoskeletal injuries
• Have had previous lower extremity surgeries or injury
• Activities of daily living require long periods of standing or driving a manual transmission car.
• Evidence or signs and symptoms of metabolic syndrome or disorder (diagnosis of diabetes or insulin resistance, elevated BP, high fasting blood sugar, abnormal cholesterol or triglyceride levels).
• Thyroid disorder
• Acute or chronic infections
• Use of systemic steroids, anabolic steroids, or growth hormone
• Are currently pregnant
• Have a family history of bleeding problems (“free bleeder"), as evidence by:
o unexplained nosebleeds (epistaxis)
o excessive or prolonged menstrual blood flow (menorrhagia)
o prolonged bleeding after minor cuts, dental procedures, tooth brushing or flossing, or trauma

• Are using medications that increase the risk of bleeding (unless it can be safely stopped):
o Aspirin
o Clopidogrel
o non-steroidal anti-inflammatory drugs
o any anticoagulation therapy (warfarin or heparin)
• Are allergic to Betadine or Xylocaine HCl.
• Any other condition or events considered exclusionary by the PI and /or physician, such as non-compliance

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:	3	3		
Black/African American:	9	9		
Latinx:	2	2		
Native Hawaiian/Pacific Islander:				
White:	56	56		
American Arab/Middle Eastern/North African:				
Indigenous People Around				

the World:				
More than One Race:				
Unknown or Not Reported:				

If unknown, please explain why:

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

- ☐ 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	43499 Massage IRB Consent Clean 101222.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.

Informed consent will be obtained written and orally. The PI or additional researchers listed on Form A will obtain consent from the subjects and payment will not be made available at this time to ensure consent will be obtained solely on voluntary basis. The method of documentation includes a written form including the eight federally required elements. Informed consent will be read orally to the subject and will be made available for the subject to read. Written consent will be obtained prior to any procedures being performed on each subject including massage and the biopsy.
All subjects will be given contact numbers in case any questions or complaints arise. Questions can be directed to the principal investigator, Dr. Dupont-Versteegden, who will be in contact with the study physicians performing the biopsies. Should a complaint arise, subjects will be asked to provide a written account of the complaint while the researchers will also provide their own account of the situation. All complaints will be collected, reported, and hand delivered to the IRB and ORI.

☐ 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.

☐ 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
Biddle	Martha	Project Assistance/Support	SP	N	N		P	Y	10/28/2020	Y	N	12/16/2019	N
Brown	Paul	Project Assistance/Support	SP	N	N		P	Y	09/22/2020	Y	N	08/31/2022	N
Bruns	Reva	Project Assistance/Support	SP	N	N		P	Y	02/21/2023	Y	N	12/16/2019	N
Buckler	Regan	Project Assistance/Support	SP	N	N		P	Y	04/14/2021	Y	N	05/20/2021	N
Butterfield	Timothy	Co-Investigator	SP	Y	N		P	Y	04/22/2020	Y	N	01/23/2018	N
Camper	Zenith	Data Collection	SP	N	N		P	Y	02/08/2023	Y	N	02/22/2023	N
Cole	Jill	Project Assistance/Support	SP	N	N		P	Y	02/21/2023	Y	N	12/16/2019	N
Confides	Amy	Project Assistance/Support	SP	N	N		P	N	02/18/2020	Y	N	04/08/2020	N
Devine	Amber	Project Assistance/Support	SP	N	N		P	Y	11/23/2021	Y	N	08/31/2022	N
Finch	Megan	Project Assistance/Support	SP	N	N		P	Y	08/08/2022	Y	N	08/31/2022	N
Forenback	Denece	Project Assistance/Support	SP	N	N		P	Y	01/08/2021	Y	N	02/25/2021	N
Gamble	Bethanie	Project Assistance/Support	SP	N	N		P	Y	10/03/2022	Y	N	10/11/2022	N
Hommel	Leta	Project Assistance/Support	SP	N	N		P	Y	01/18/2022	Y	N	01/23/2018	N
Kern	Philip	Co-Investigator	SP	N	N		P	Y	07/03/2020	Y	N	01/23/2018	N
Long	Douglas	Study Coordinator	DP	Y	Y		P	Y	02/17/2022	Y	N	01/23/2018	N
Mandal	Prabin	Project Assistance/Support	SP	N	N		P	Y	06/27/2022	Y	N	08/31/2022	N
Maynard	Marshall	Project Assistance/Support	SP	N	N		P	Y	06/16/2022	Y	N	08/31/2022	N
Moylan	Jennifer	Project Assistance/Support	SP	N	N		P	Y	09/10/2020	Y	N	01/23/2018	N
Nieto	Alayne	Data Collection	SP	N	N		P	Y	05/16/2022	Y	N	02/22/2023	N
Ross	James	Project Assistance/Support	SP	N	N		P	Y	04/27/2022	Y	N	08/31/2022	N

Last Name	First Name	Responsibility In Project	Role	AC	Contact	Degree	StatusFlag	(HSP)	(HSP)Date	(RCR)	Removed?	Last Updated	SFI
Swain	Audrie	Project Assistance/Support	SP	N	N		P	Y	02/11/2022	Y	N	08/31/2022	N
Vincent	Sylvia	Project Assistance/Support	SP	N	N		P	Y	02/16/2021	Y	N	08/31/2022	N
Watts	Linda	Project Assistance/Support	SP	N	N		P	Y	11/10/2021	Y	N	10/24/2022	N
Allman	Ariel	Project Assistance/Support	SP	N	N		P	N	07/28/2015		Y	01/23/2018	N
Bowlds	Hannah	Project Assistance/Support	SP	N	N		P	Y	08/03/2020	Y	Y	03/28/2023	N
Chamblin	Lisa	Project Assistance/Support	SP	N	N		P	Y	08/02/2022	Y	Y	02/25/2021	N
DeCoster	Ryan	Project Assistance/Support	SP	Y	N		S	N	09/04/2019		Y	01/23/2018	N
Eisenhut	Sarah	Project Assistance/Support	SP	N	N		P	N	07/29/2015		Y	01/23/2018	N
Elgumati	Sumya	Project Assistance/Support	SP	N	N		P	N	03/25/2017		Y	09/13/2020	N
Farrar	Nicholas	Project Assistance/Support	SP	N	N		P	N	10/31/2016		Y	01/23/2018	N
Holbrook	Kathryn	Project Assistance/Support	SP	N	N		P	N	12/12/2018	N	Y	02/25/2021	N
Hunt	Emily	Project Assistance/Support	SP	Y	N		P	N	01/24/2018		Y	07/28/2021	N
Kaenzig	Janet	Project Assistance/Support	SP	N	N		P	Y	05/09/2021	Y	Y	12/14/2018	N
Memmini	Allyssa	Project Assistance/Support	SP	N	N		P	N	09/16/2016		Y	01/23/2018	N
Minix	Kathleen	Project Assistance/Support	SP	N	N		P	Y	04/12/2021	Y	Y	02/22/2023	N
Rice	Linda	Project Assistance/Support	SP	N	N		P	Y	09/10/2021	Y	Y	05/16/2022	N
Skaggs	Kylee	Project Assistance/Support	SP	N	N		P	Y	11/01/2022	Y	Y	02/22/2023	N
Smith	Kayla	Project Assistance/Support	SP	N	N		P	N	06/04/2019	N	Y	07/28/2021	N
Stiehler	Julie	Project Assistance/Support	SP	N	N		P	Y	04/15/2021	Y	Y	05/16/2022	N
Tillery	Melanie	Project Assistance/Support	SP	N	N		P	Y	10/05/2021	Y	Y	02/22/2023	N
True	Laura	Project Assistance/Support	SP	N	N		P	N	04/13/2020	N	Y	07/28/2021	N
Van Pelt Jr	Douglas	Project Assistance/Support	SP	Y	N		S	Y	08/26/2020	N	Y	07/28/2021	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).

Massage is considered a manipulative and body-based therapy in complementary and integrative medicine (CIM). With about 18 million individuals undergoing massage therapy annually, it is the 5th most widely used form of CIM in the U.S.1 It is defined as "a mechanical manipulation of body tissues with rhythmical pressure and stroking for the purpose of promoting health and well-being."2 There are many different techniques of massage with Swedish massage, a combination of effleurage, petrissage, friction, vibration, and percussion, being one of the most common.3 The proposed benefits of massage, as stated by the American Massage Therapy Association (AMTA), are relief of muscle tension and stiffness, faster healing of strained muscles and sprained ligaments, reduced muscle pain, swelling and spasm, greater joint flexibility and range of motion, and even enhanced athletic performance.4 Evidence has also shown massage to have an influence on immune function, depression, relaxation/sleep, and overall quality of life.4-6

With several cited and reported benefits of massage, and the increased usage of it as a treatment option, more research is needed to provide evidence of it as an effective and valid treatment. If research continues to prove it to be safe and effective, more health care professionals can use and suggest it as a treatment option and more insurance companies will likely begin to cover the costs of these treatments. Previous literature, however, has concluded that more standardized controlled techniques are needed in massage research to truly validate its effectiveness.3

Animal research has clarified many uncertainties associated with massage but whether or not these findings are applicable to humans has yet to be determined. It is unknown if the same physiological effects seen in animals are seen in humans, and whether a similar dosage produces those effects. Crane et al.7 were the first to perform a mechanistic study on the effects of massage on human tissue. Their results revealed that massage may be beneficial in reducing inflammation and promoting mitochondrial biogenesis in skeletal muscle that has been acutely damaged after exercise.7

Skeletal muscle plays a significant role in maintaining function and contributing to our overall health.8 Conditions that involve immobilization, bed rest, or any other types of disuse cause atrophy and several other effects in muscle tissue. Due to the impaired muscle function associated with atrophy9, it is vital, clinically, to find interventions that attenuate or even possibly reverse muscle atrophy that is commonly caused by disuse. It would be ideal to find interventions that patients who are not able to exercise, such as those in the intensive care unit (ICU), can receive to help maintain their skeletal muscle integrity and function.

Our preliminary data on rats have shown that massage has an anabolic effect in growth-perturbed muscles. Massage enhanced protein synthesis and muscle size in animals undergoing regrowth after atrophy. Also, massage applied during a period of disuse-induced atrophy attenuated muscle loss and reversed the level of protein synthesis to normal. However, unperturbed muscle did not show this growth-promoting effect. These results indicate that massage could serve as an intervention for the loss of muscle during atrophy and aid in regrowth. However, studies in humans have not been performed yet.

The unilateral lower limb suspension (ULLS) method has been recently developed to mimic the 0-g conditions in space and assist in assessing the efficacy of interventions to combat muscle atrophy and facilitating in-vivo muscle performance studies.10 ULLS has been shown to mimic bed rest and is a valid technique.11 Just as muscle tissue responds to loading, muscle responds to unloading as well. Unloading a muscle can result in muscle atrophy at a weekly rate of about 2.5% particularly for knee extensors.10 Short term ULLS (10-16 days) doesn't seem to result in large macroscopic changes in muscle size or CSA but individual muscle fiber size has been shown to decrease at a weekly rate that varies between 3-8% across different studies.10 In specific studies, increased markers for muscle proteolysis were found after 3 days of ULLS10 and protein synthesis rate appeared to decrease after 10 days of ULLS.9 ULLS is a well-accepted model for disuse-induced muscle atrophy.10 There are few systemic or general deconditioning effects that have been discovered from incorporating ULLS into research procedures.10 Overall, ULLS has been shown to be a valid, practical, and cost-effective method to induce atrophy and study the effects on skeletal muscle.10

Objectives

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

The objective of this study is to determine if an optimal load of massage induces protein synthesis and increases cross sectional area

in unperturbed or atrophied human skeletal muscle tissue. In addition, we will determine whether an optimal load induces muscle damage and causes a satellite cell response in control and atrophied human skeletal muscle tissue while also examining extracellular vesicles and their possible role in a physiological phenomenon called the crossover effect. We hypothesize that 15 min of massage with a 35 N load for 4 days will not induce muscle damage but will still cause an increase of satellite cells, extracellular vesicles, as well as in cross sectional area and protein synthesis.

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.

This study is designed as a randomized control trial. Figure 1 shows the time line for the study. There will be four groups of subjects, (1) normal weight-bearing with massage (WB-M), (2) normal weight bearing without massage (WB-C) (3) ULLS, no massage (control, U-C), and (4) ULLS with massage (U-M). We expect to recruit 140 subjects to in order in fully enroll 128 (32 per group, n = 3 per group for attrition). For measurement of protein synthesis, participants will ingest three 50 mL doses of heavy water (2H2O) for the first two days and the dose will decrease to two 50 mL doses per day (a total of 1000 mL of heavy water for each subject over the course of the trial). 3-4 blood draws will be taken on days 2, 5, 7, and 9 and each will be drawn at the same time each day. Subjects in U-C and U-M groups will have their left leg immobilized and suspended using a hinged knee brace. Those immobilized will be required to wear the brace and use crutches at all times, except while showering and sleeping. Immobilization will begin on day 2 and will continue until the end of the study (day 9). Members of the research team will use a custom-made device to massage the quadriceps region of subjects' left leg and leave the right leg unaffected in the WB-M and U-M groups. Massage treatments will begin on day 3 and will take place every other day (day 5, 7, 9) until the end of the study. A baseline muscle biopsy of the vastus lateralis will be taken from the right leg on day 2, prior to the first massage. Muscle biopsies will then be taken from both legs 4-6 hours after the last massage on day 9, and the muscle tissue will be frozen for further examination. (See Figure 1). Sham treatment for the WB-C and U-C groups will include us touching the skin using a light brushing technique.

For the weight bearing groups as comparison groups,they will also have to drink deuterium oxide heavy water over 9 days which is associated with 3-4 blood draws but will not have to wear a brace or use crutches. Weight bearing control groups will only have one biopsy taken on day 9 while weight bearing massage groups will have two biopsies taken (day 2- right leg, and day 9- left massaged leg). This will still allow for effective comparison between groups and will reduce burden on these participants. We will enroll the weight bearing groups after immobilization groups to ensure that those interested in the study will not drop out after possible randomization into the immobilization group.

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

Information regarding the study will be made available to students and personnel at the University of Kentucky, Lexington campus, using flyers. Individuals who work or study under the faculty member(s) of the study staff will be excluded from the study. Subjects may be recruited from other ongoing or concluded studies. If eligible subjects express interest in participation, we will contact the subject via e-mail or phone. There will be an opportunity for subjects to ask any individual questions before informed consent is obtained. Informed consent will be obtained prior to the beginning of testing for inclusion/exclusion criteria. Participants will be chosen based on their availability and embodying healthy status as indicated in our inclusion and exclusion criteria.
Information regarding the study will be made available to students and personnel at the University of Kentucky, Lexington campus, using flyers. The CCTS has an extensive marketing and recruitment program who will advise us on optimal recruiting strategies. These

strategies may include:
Print advertisements: 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.

Internet and Social Media: 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.

Research Participant Registries: 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.
*ResearchMatch.org will be utilized as a recruitment tool for this protocol. ResearchMatch.org is a national electronic, web-based recruitment tool that was created through the Clinical & Translational Science Awards Consortium in 2009 and is maintained at Vanderbilt University as an IRB-approved data repository (see IRB #090207)." Once UK IRB approval is obtained the researcher or proxy will upload a flyer with no contact information will by email via ResearchMatch to selected de-identified participants in the ResearchMatch registry. If the de-identified participant selects "Yes, I'm interested!" the researcher or proxy will receive information about participant and they may contact them with more information about their research study. If the participant selects "No, thanks", researcher or proxy will not receive any information from de-identified participant.

Outreach activities: 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 brings all relevant study flyers that are enrolling participants.

Attachments

Attach Type	File Name
Advertising	REHAB-191 MON[1] MP edit APPROVED.pdf
Advertising	REHAB-191_flyerAPPROVED.pdf
Advertising	REHAB-191_ResearchMatch email APPROVED.pdf
Advertising	REHAB-191_SocialMedia APPROVED.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.

Cyclic Compressive Loading (CCL) Device Reliability and Validity Testing:
Forty participants will be requested to participate in pilot testing of the CCL device. This testing will be used to validate the equipment. Two different clinicians will massage all participants for 15 minutes on two separate days. The load applied to the tissue will be measured and compared between clinicians and days. This will allow analysis of inter-rater reliability and test-retest reliability. The same inclusion and exclusion criteria for the participants will be used as in the original study.

Medical Health Questionnaire:
Potential subjects will be verbally screened to see if they are eligible for this study.

Heavy Water:
Deuterium oxide heavy water (2H2O) is a stable, non-radioactive isotope that is indistinguishable from normal water. It is simply water that has a higher amount of a natural, but less abundant, form of hydrogen. Subjects will be required to ingest the heavy water for 9 days. (99% D2O, Cambridge Isotope Laboratories). A target of 1-2% enrichment is achieved during a one week priming stage and maintained for the remainder of the study. Subjects will be sent home with 50 mL doses of heavy water in sealed sterile vials. The first two days, they will consume one 50 mL vial of the heavy water three times a day (150mL/day). The next 7 days, they will consume one 50 mL vial twice a day (100mL/day). This will total 1000mL of water per subject. Over the course of the 9 day trial, the subjects' blood will be drawn on day 2, 5, 7, and 9.

Blood Draws:
Blood samples will be obtained for protein synthesis measures and for the assessment of exosomes and circulating miRNAs. Left over blood will be stored in the lab indefinitely. Approximately 5-25 ml will be drawn.

Immobilization:

Participants of the immobilization/massage and immobilization/no massage groups will be placed in a knee immobilizer on their left leg and crutches, and will be non-weight-bearing starting on day 2 (after the first two days of heavy water intake) of the 9 day trial for a total of 7 days. The participants will be required to log and explain on the attached Immobilization Time Log any time they did not use/wear the crutches or knee immobilizer in order to track compliance.

Massage:
Subjects will report to the Human Performance Lab, in room B04A of the Multidisciplinary Science building. A custom-made cyclic compressive loading (CCL) device will be used to apply a mechanical load to the left thigh starting on day 3. The knee immobilizer will be removed, and the subjects will be positioned right lateral recumbent with their left hip and leg slightly flexed and the left leg supported by a wedge to maintain anatomical position in the frontal plane. The CCL device will be a commercially available massage roller instrumented with a strain gage to measure applied load. Massage application using a 35 newton load will be applied for 15 minutes every other day over the course of 7 days (days 3, 5, 7, and 9). The CCL device will be placed 10cm proximal to the superior pole of the patella over the vastus lateralis muscle of the left leg, and a normal force of 35N will be applied while rolling the device proximally along the length of the vastus lateralis at a rate equal to one muscle length over 2 seconds. Without interruption, the direction of the massage will then be reversed and the same load and loading rate will be applied proximal to distal. Thus, one complete cycle of massage to the vastus lateralis will take 4 seconds, corresponding to a duty cycle of 0.25Hz. Massage will continue for 15 minutes, resulting in approximately 225 complete cycles. Sham treatment (WB-C and U-C) groups will receive a light touching on the skin using a light brushing technique.

We have previously shown that the beneficial effects of massage can be optimized by application of the appropriate dose12, including considerations for timing of massage application13, duration of massage14 and the magnitude of applied load.5,12 Therefore, we have used allometric scaling laws to calculate optimal loads based on our early investigations demonstrating effectiveness of massage for limiting inflammation and accelerating recovery after injury in rabbit skeletal muscle.15 We have used this method to successfully scale the optimized loads to rats5 and have applied the same methods to calculate the appropriate loads for human massage. We have determined that the optimal load for human vastus lateralis is a normal force of 35N.

Muscle Biopsies:
On day 2 of the study (after the first two days of heavy water intake), a baseline muscle biopsy will be taken from the vastus lateralis muscle of the right leg. Subjects will be instructed not to eat or drink anything for breakfast the last day of the study when they come in for the last massage and the biopsies. Subjects will be provided a light breakfast consisting of a choice of bagel with cream cheese or

granola bar or muffin with banana and orange juice. Four hours after the last bout of massage one muscle biopsy will be taken from the left and the right vastus lateralis each. Biopsies (100-300 mg tissue) will be taken by one of the two physicians on the study or the physician assistants listed in the protocol. The tissue will be frozen for analysis by the experimenters. In exercise literature a waiting period of about 2-6 hours is what is shown to demonstrate changes in the expression of genes associated with muscle size regulation.16,17 In an effort to respect the subjects' time, a waiting period of 4-6 hours was decided. The subjects are allowed to walk around after the massaging, but are asked to refrain from exercising for the 4 hours in between the massage treatment and the muscle biopsy.

Muscle Biopsy Procedure:
A muscle biopsy sample will be obtained from the vastus lateralis. The biopsy procedure will proceed as follows for each subject taking approximately 45 minutes. Subjects will report to the procedural room located in the Center for Clinical and Translational Science (CCTS). Subjects will lie down and have a 1 inch by 1 inch portion of hair removed with a disposable razor on the outer surface of the thigh as necessary. The site will then be cleaned with alcohol followed by the application of Betadine. A local anesthetic (1% Xylocaine HCl, 3cc) will be used to numb an area the size of a quarter on the site of the outer thigh over the vastus lateralis muscle approximately a hand width above the knee using a 23-gauge, 1 inch needle, subcutaneously. Anesthetic will further be injected into the subcutaneous space of the numbed area from the muscle to the dermis. After 5-10 minutes, a sterile scalpel will be used to test for numbness before the procedure proceeds. In our experience, 5 minutes is adequate to sufficiently numb the area for the biopsy procedure. A ¼ inch wide incision will be made through the skin in the center of the anesthetized area with a sterile, single-use, #11 disposable scalpel. The incision needs to perforate the fascia of the vastus lateralis muscle sufficiently to allow for subsequent entry of the biopsy needle. The depth of the incision will be adjusted to accommodate estimated subcutaneous fat depth. A sterile 5 mm Berkstrom biopsy needle (Pelomi Industries, Denmark) will be passed through the ¼ inch incision into the muscle and a small piece (the size of a pencil eraser, equal to ~ 100-300 mg) of muscle will be removed. The angle of entry for the biopsy will be medial to lateral. The biopsy team will use the suction biopsy technique, whereby a small amount of suction with a Monoject 60cc syringe attached via sterile tubing to the end of the trocar will be applied to the needle prior to closing of the trocar, which enhances the investigators' ability to maximize the amount of muscle obtained. A conchotome may also be used to remove the muscle. Manual pressure will be applied to the wound until bleeding stops. The muscle biopsy site will be cleaned with an alcohol preparation to clear all betadine and standard procedures will be used to close the wound. The biopsied area will be covered with gauze and a pressure wrap applied. The muscle tissue obtained will be divided into pieces and processed for analysis of muscle phenotype.

COVID-19 testing:
During the pandemic, participants will be required to have a negative COVID-19 test before undergoing any muscle biopsy until further notice.

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.

Demographic information
Results of blood tests after ingestion of heavy water
Analysis of muscle biopsies
Social Security Number

Attachments

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.

This protocol will be performed at the CCTS. The CCTS comprises a research staff that is specially trained to make complex research observations and accurate patient assessments and documentation, to utilize precision in the collection and processing of specimens for research purposes, and to implement exemplary safe patient care practices. This unit is available to conduct research procedures for investigators throughout the institution or, under certain conditions, outside the institution.
All muscle tissue will be used in the laboratory of Dr. Dupont-Versteegden and Dr. Butterfield.

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.

There are some potential risks associated with the procedures presented in this protocol.
Muscle Biopsies: With the biopsy procedures, there is a risk of bleeding, bruising, pain, infection, and scarring of the skin. Bleeding could rarely result in development of a hematoma. Pain and soreness usually resolves within 24-48 hrs post-procedure. Numbness of the skin near the biopsy site may occur and is usually temporary, but this numbness may persist indefinitely. An allergic reaction to the anesthetic also may occur but is rarely seen.
Heavy Water (2H2O): The only side effect reported by others is (in rare subjects) a sensation of dizziness or vertigo soon after the first dose. This is presumed to be due to a disequilibrium between H2O and 2H2O in the inner ear, and some subjects are sensitive to this. This side effect, when it occurs, goes away and the initial dosing will occur in the CCTS where subjects are monitored.
Blood Draws: With drawing blood, there is a risk of soreness, bruising, pain, infection, bleeding, and fainting. Any pain, bruising, or soreness will usually resolve without any treatment. Any infection, bleeding, or fainting can be treated.
Massage: The only side effect reported from massage is possible soreness during and/or after the session. It will go away with or without treatment within 24-48 hours so treatment is not required.
Immobilization: With use of the knee brace there is a risk of chaffing, muscle atrophy of the immobilized leg, and muscle soreness of the non-immobilized leg. It is important to note that all effects with use of the knee brace are reversible.
Participants will receive no personal benefit by becoming involved with this study. However, subjects are helping the investigators gain knowledge to better understand the effect of massage on healthy human muscle and to possibly help identify therapies associated with massage.

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).

Participation in this study is strictly voluntary. There are no other alternative treatments, procedures, or choices for the subjects except for not to participate in the study.

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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

Materials obtained in this study are for the primary purpose of research. Materials will include the muscle biopsy analysis. Muscle biopsies will be stored in the laboratories of Drs. Dupont-Versteegden and Butterfield. For confidentiality and privacy, each subject will be given a study identification number. All electronic data will be stored on an encrypted jump drive and any information will be transferred on a password-protected computer. All hardcopy data will be locked in a filing cabinet found within a locked office located within the College of Health Sciences offices. Only approved study personnel will have access to this locked office.
All data will be either stored in locked file cabinets, on secured password protected computer spreadsheets, within the investigator's laboratories (after the tissue has been de-identified). Each subject will be identified using only a study identification number and the investigators of this study will keep private all research records that identify the subjects. The information obtained from this research will be combined and presented in written materials, but these materials will not contain any subject identification. Only personnel associated with this study will have access to the data and to keep information confined, all subject information will be kept under lock and key.
All procedures proposed as part of this research protocol will be conducted or supervised by trained and experienced professionals in their fields. For the muscle biopsy samples, appropriate technique and all usual precautions including sterilization to help avoid any risk associated with these procedures will be taken. Patients will be asked to discontinue medications that may be associated with excessive bleeding, including aspirin and non-steroidal anti-inflammatory drugs, for at least five days prior to the biopsy procedure. We will recommend that patients remain active following the procedure which may mitigate against the pain and soreness/tightness post procedure. Post-procedure analgesics will be provided if requested and if medically appropriate, but the individual will be responsible for cost as outlined in "What happens if you get hurt or sick". All participants will be given an instruction sheet for post-muscle biopsy care with phone contact numbers (Appendix G). The responsible study physician and an established method of contact for the study personnel to this study physician will be in place at the time of the biopsy. The research coordinator will follow up with the participant day 1 and day 2 after the muscle biopsy. The study physician will arrange a visit to evaluate the biopsy site if there are any concerns expressed by the participant or if there is any concern by study personnel. In case of an adverse event during the procedure, personnel will have access to an AED located close by and will be trained in both CPR and AED. Confidentiality will be maintained at all times. All data and specimens will be stored in a locked office or laboratory where it can be only accessed by study personnel. Subject information will not be discussed outside of the research team.

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 receive compensation based on which group they are randomly assigned to. All participants will receive $15 for blood draws and $50 per biopsy. Those assigned to the immobilization group will receive $100 for unloading. The participants will receive a $65 bonus for completion of the study for a total of $375 if they are in the immobilization groups and $130-$180 for weight bearing control groups.

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 will be no costs to the participants.

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.

Because this protocol involves muscle biopsy procedures, the study will be monitored by a Data and Safety Monitoring Board (DSMB). The UK CCTS has a standing DSMB and this established board will monitor this study for recruitment, adverse events, and compliance, and report to the IRB every 6 months. The DSMB is chartered to comply with the regulatory needs of a broad spectrum of

institutional protocols and are familiar with the compliance requirements of federal agencies. The DSMB will review protocol performance, regulatory requirements, particularly the reporting of adverse events, as well as documents necessary for IRB approval. The DSMB can audit protocols when necessary and communicates directly with the IRB.

Risk Assessment: A serious adverse event (AE) is defined as either fatal or life-threatening, requires inpatient hospitalization or prolongation of an existing hospitalization, results in persistent or significant disability/incapacity, is medically significant or requires intervention to prevent one or other of the outcomes listed above. This study is greater than minimal risk.
Grading scale for AE intensity:

Mild: Discomfort noticed but no disruption of normal daily activity.

Moderate: Discomfort sufficient to reduce or affect normal daily activity.

Severe: Incapacitating with inability to work or perform normal daily activity.

Attribution scale for AE reporting:

Probable: AE is related to the procedure (biopsies), including pain, bleeding, infection, and death, if death resulted from one of the aforementioned complications.

Possible: AE follows the biopsy within a reasonable period (within 7 days), but may have been produced by other factors.

Remote: AE does not follow the biopsy within a reasonable period (more than 7 days) and could readily have been produced by other factors.

Unrelated: AE is judged to be clearly due to extraneous causes and does not meet the above criteria.

Monitoring Plan Monitoring for adverse events will be conducted in real-time by the principal investigators and study coordinator. Risks involved with this study are considered greater than minimal risk.

AE Reporting Serious AEs will be reported verbally to the IRB and CCTS within 24 hours and in writing within 48 hours of the event. Unanticipated events will be reported to the CCTS in real time and to the IRB no later than 48 hours after the event. Annual reporting of adverse events will be conducted with the IRB annual review/renewal according to their protocol. These reports will also be forwarded to the CCTS. The CCTS Administration will be informed within 15 days if for any reason the IRB or any other body temporarily or permanently suspends the study.

Data Accuracy and Protocol Compliance All protocols involving human subjects will be directly supervised by the PI or her colleagues to assure compliance. All samples will be coded to eliminate bias. Detailed plans for maintaining subject confidentiality are described in the consent form.

Conflict of Interest There is no conflict of interest. Investigators on this project have extensive experience with similar protocols and are well qualified to monitor progress and to determine what rate of unexpected AEs is acceptable. For these reasons, Dr. Dupont-Versteegden and her colleagues are capable of monitoring for safety objectively and without bias.

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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) as used 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, as used 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

- [x] UK Classroom(s)/Lab(s)
- [ ] UK Clinics in Lexington
- [ ] UK Clinics outside of Lexington
- [ ] UK Healthcare Good Samaritan Hospital
- [x] 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, at sites that are geographically separate from 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:

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

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

Other:

National Center for Complementary and Integrative Health (NCCIH)

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

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.):

National Center for Complementary and Integrative Health (NCCIH)

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

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

OTHER REVIEW COMMITTEES

0 unresolved comment(s)

If you check any of the below committees, additional materials may be required with your application submission.

Does your research fall under the purview of any of the other review committees listed below? [*If yes, check all that apply and attach applicable materials using the attachment button at the bottom of your screen.*]

○ Yes ◉ No

Additional Information

- ☐ Institutional Biosafety Committee
- ☐ Radiation Safety Committee
- ☐ Radioactive Drug Research Committee
- ☐ Markey Cancer Center (MCC) Protocol Review and Monitoring Committee (PRMC)
- ☐ Graduate Medical Education Committee (GME)
- ☐ Office of Medical Education (OME)

- Institutional Biosafety Committee (IBC) - Attach required IBC materials
- Radiation Safety Committee (RSC) - For applicability, see instructions and attach form
- Radioactive Drug Research Committee (RDRC)
- Markey Cancer Center (MCC) Protocol Review and Monitoring Committee (PRMC)** - Attach MCC PRMC materials, if any, per instructions.
- Office of Medical Education (OME)
- Graduate Medical Education Committee (GME)

Attachments

**** If your study involves cancer research, be sure to select "Cancer Research" in the "Research Attributes" section.** ORI will send your research protocol to the Markey Cancer Center (MCC) Protocol Review and Monitoring Committee (PRMC). The MCC PRMC is responsible for determining whether the study meets the National Cancer Institute (NCI) definition of a clinical trial and for issuing documentation to you (the investigator) which confirms either that PRMC approval has been obtained or that PRMC review is not required. Your IRB application will be processed and reviewed independently from the PRMC review.

ADDITIONAL INFORMATION/MATERIALS

0 unresolved comment(s)

Do you want specific information inserted into your approval letter? ○ Yes ◉ No

Approval Letter Details:

If you wish to have specific language included in your approval letter (e.g., serial #, internal tracking identifier, etc…), type that language in the box below exactly as it should appear in the letter. The text you enter will automatically appear at the top of all approval letters, identical to how you typed it, until you update it. Don't include instructions or questions to ORI staff as those will appear in your approval letter. **If these details need to be changed for any reason, you are responsible for updating the content of this field.**

Additional Materials:

If you have other materials you would like to include for the IRB's consideration, check all that apply and attach the corresponding documents using the Attachments button below.

- ☐ Detailed protocol
- ☐ Dept. of Health & Human Services (DHHS) approved protocol (such as NIH sponsored Cooperative Group Clinical Trial)
- ☑ Other Documents

Protocol/Other Attachments

Attach Type	File Name
Other	43499 Massage Progress Report CR 032823.pdf

NOTE: [Instructions for Dept. of Health & Human Services (DHHS)-approved protocol]

If you have password protected documents, that feature should be disabled prior to uploading to ensure access for IRB review.

To view the materials currently attached to your application, click “All Attachments” on the left menu bar.

SIGNATURES (ASSURANCES)

0 unresolved comment(s)

Introduction

All IRB applications require additional assurances by a Department Chairperson or equivalent (DA), and when applicable, a Faculty Advisor or equivalent (FA). This signifies the acceptance of certain responsibilities and that the science is meritorious and deserving of conduct in humans. The person assigned as DA *should not* also be listed in the Study Personnel section, and the individual assigned as FA *should* be listed in the Study Personnel section.

For a list of responsibilities reflected by signing the Assurance Statement, refer to "What does the Department Chairperson's Assurance Statement on the IRB application mean?"

For a detailed illustration of how to complete this section, please review the short video tutorial "Signatures (Assurance) Section - How to Complete" in the E-IRB Video Tutorial Library.

Required Signatures:

First Name	Last Name	Role	Department	Date Signed	
Janice	Kuperstein	Department Authorization	Health Sciences - Rehabilitati	01/24/2018 01:23 PM	View/Sign
Esther	Dupont-Versteegden	Principal Investigator	Health Sciences - Rehabilitati	01/24/2018 01:19 PM	View/Sign

Department Authorization

☑ This is to certify that I have reviewed this research protocol and that I attest to the scientific validity and importance of this study; to the qualifications of the investigator(s) to conduct the project and their time available for the project; that facilities, equipment, and personnel are adequate to conduct the research; and that continued guidance will be provided as appropriate. When the principal investigator assumes a sponsor function, the investigator has been notified of the additional regulatory requirements of the sponsor and by signing the principal investigator Assurance Statement, confirms he/she can comply with them.

*If the Principal Investigator is also the Chairperson of the department, the Vice Chairperson or equivalent should complete the "Department Authorization".

**IF APPLICABLE FOR RELIANCE: I attest that the principal investigator has been notified of the regulatory requirements of both the Reviewing and Relying IRBs, according to the information provided in the E-IRB application. The attached Reliance Assurance Statement, signed by the principal investigator, confirms that he/she can comply with both sets of IRB requirements.

Principal Investigator's Assurance Statement

I understand the University of Kentucky's policies concerning research involving human subjects and I agree:

1. To comply with all IRB policies, decisions, conditions, and requirements;
2. To accept responsibility for the scientific and ethical conduct of this research study;
3. To obtain prior approval from the Institutional Review Board before amending or altering the research protocol or implementing changes in the approved consent/assent form;
4. To report to the IRB in accord with IRB/IBC policy, any adverse event(s) and/or unanticipated problem(s) involving risks to subjects;
5. To complete, on request by the IRB for Full and Expedited studies, the Continuation/Final Review Forms;
6. To notify the Office of Sponsored Projects Administration (OSPA) and/or the IRB (when applicable) of the development of any financial interest not already disclosed;
7. Each individual listed as study personnel in this application has received the mandatory human research protections

education (e.g., CITI);
8. Each individual listed as study personnel in this application possesses the necessary experience for conducting research activities in the role described for this research study.
9. To recognize and accept additional regulatory responsibilities if serving as both a sponsor and investigator for FDA regulated research.

☑ Furthermore, by checking this box, I also attest that:

- I have appropriate facilities and resources for conducting the study;
- I am aware of and take full responsibility for the accuracy of all materials submitted to the IRB for review;
- If applying for an exemption, I also certify that the only involvement of human subjects in this research study will be in the categories specified in the Protocol Type: Exemption Categories section.
- If applying for an Abbreviated Application (AA) to rely on an external IRB, I understand that certain items above (1, 3, 4, 7-8) may not apply, or may be altered due to external institutional/IRB policies. I document my agreement with the Principal Investigator Reliance Assurance Statement by digitally signing this application.

*You will be able to "sign" your assurance after you have sent your application for signatures (use Submission section). Please notify the personnel required for signing your IRB application after sending for signatures. Once all signatures have been recorded, you will need to return to this section to submit your application to ORI.

SUBMISSION INFORMATION

0 unresolved comment(s)

***** If this Continuation Review entails a change in the scope of your activities to include COVID-19 related research, please insert "COVID19" at the start of your Project and Short Titles.*****

Each Section/Subsection in the menu on the left must have a checkmark beside it (except this Submission section) indicating the Section/Subsection has been completed. Otherwise your submission for IRB review and approval cannot be sent to the Office of Research Integrity/IRB.

If applicable, remember to update the Approval Letter Details text box under the Additional Information section

If your materials require review at a convened IRB meeting which you will be asked to attend, it will be scheduled on the next available agenda and you will receive a message to notify you of the date.

If you are making a change to an attachment, you need to delete the attachment, upload a highlighted version that contains the changes (use Document Type of "Highlighted Changes"), and a version that contains the changes without any highlights (use the appropriate Document Type for the item(s)). Do **not** delete approved attachments that are still in use.

Principal Investigator's Assurance Statement

I understand the University of Kentucky's policies concerning research involving human subjects, and I attest to:

1. Having reviewed all the investigational data from this study, including a compilation of all internal and external unanticipated problems.
2. Having reviewed, if applicable, information from the sponsor including updated investigator brochures and data and safety monitoring board reports.

I also attest that I have reviewed pertinent materials concerning the research and concluded either:

A. The human subject risk/benefit relationship is NOT altered, and that it is not necessary to modify the protocol or the informed consent process,
OR,
B. The human subject risk/benefit relationship has been altered, and have previously submitted or am including with this continuation review submission, a modification of the research protocol and informed consent process.

☑ By checking this box, I am providing assurances for the applicable items listed above.

Your protocol has been submitted.

Download all

	Document Type	File Loaded	Document Description	File Size	Modified By	Mod Date
	ApprovalLetter	ApprovalLetter.pdf		0.079	ovmo223	4/14/2023 8:54:52 AM
	Stamped Consent Form	43499 Massage IRB Consent Clean 101222.pdf		0.288	ovmo223	4/14/2023 8:54:52 AM
	AddInfoProduct	43499 Massage Progress Report CR 032823.pdf	Progress Report	0.107	delong2	3/28/2023 4:17:38 PM
	CR_DataSafetyMonitoring	DSMB Review 021523 Dupont Massage.pdf	DSMB Submitted Materials	0.526	delong2	3/28/2023 3:54:37 PM
	CR_DataSafetyMonitoring	022823 DSMB LOCI - Massage II.pdf	Letter of Continuation from DSMB	0.230	delong2	3/28/2023 3:53:45 PM
	CR_EntireConsent	HuMA39 Consent.pdf	HuMA39 Consent	0.396	delong2	3/28/2023 3:46:28 PM
	CR_EntireConsent	HuMA38 Consent.pdf	HuMA38 Consent	0.394	delong2	3/28/2023 3:45:47 PM
	Informed ConsentHIPAA Combined Form	43499 Massage IRB Consent Clean 101222.pdf	Consent Clean	0.217	delong2	10/13/2022 9:55:47 AM
	AdditionInfoConsiderations	43499 Massage Progress Report CR 051622.pdf	Protocol Progress Report	0.156	delong2	5/16/2022 10:03:51 AM
	Advertising	REHAB-191_SocialMedia APPROVED.pdf	Social Media Approved	0.157	delong2	2/24/2020 2:17:06 PM
	Advertising	REHAB-191_ResearchMatch email APPROVED.pdf	Research Match PR Approved	0.034	delong2	2/24/2020 2:16:54 PM
	Advertising	REHAB-191_flyerAPPROVED.pdf	Flyer Approved	0.137	delong2	2/24/2020 2:16:14 PM
	Advertising	REHAB-191 MON[1] MP edit APPROVED.pdf	Monitor PR Approval	1.322	delong2	2/24/2020 2:15:48 PM

Protocol Changes

Protocol Number: 43499

Click link to sort Changed Date
Project Information ProjectEndDate changed by delong2 on 3/29/2023 11:25:19 AM
6/30/20234 12:00:00 AM

Study Personnel Changes:

10171824

Name	Bowlds, Hannah
Email	Hannah.Bowlds@uky.edu
Role 1	SP
Role 2	Project Assistance/Support
Is Contact	N
Room	
Dept Code	
Dept Desc	
SFI	N
Is PIRN	

Protocol Type Comment by Samuel Bell - ORI to PI on 3/29/2023 11:07:39 AM
A couple of screening comments. Please see the following sections of the protocol for specifics:

- Project Information
- Study Personnel

Project Information Comment by Samuel Bell - ORI to PI on 3/29/2023 8:43:57 AM
It's recommended to extend the projected project end date by at least one calendar year.

Study Personnel Comment by Douglas Long - PI to PI on 3/29/2023 11:29:37 AM
Study personnel have been notified of HSP refreshers needed. These will be completed asap. Project info end date was also extended by 1 year.

Study Personnel Comment by Samuel Bell - ORI to PI on 3/29/2023 8:46:13 AM
Also, FYI - Timothy Butterfield's HSP training is set to expire in mid-April. They should plan to complete refresher HSP training as soon as possible.

Study Personnel Comment by Samuel Bell - ORI to PI on 3/29/2023 8:45:23 AM
Amy Confides' human subject protection training has expired. They will need to complete refresher HSP training or be temporarily removed from the protocol in order to process the approval. More information on refresher HSP training can be found at the following link: https://www.research.uky.edu/office-research-integrity/three-year-refresher-hsp-training-faqs