

UNIVERSITY OF CALIFORNIA LOS ANGELES CONSENT TO PARTICIPATE IN RESEARCH

Exercise in Stimulant Use Disorder: Dopamine Receptor Upregulation and Neural Function

INTRODUCTION

Edythe London, PhD and associates from the Department of Psychiatry and Biobehavioral Sciences at the University of California, Los Angeles (UCLA) are conducting a research study.

The researchers will explain this study to you. **Research studies are voluntary and include only people who choose to take part.** Please take your time about deciding whether to participate in this study. Before deciding:

- You can discuss this study with friends and family.
- You can also discuss it with your health care doctor or request a second opinion.
- If you have any questions, you can ask the researchers for more information before deciding to participate.

The research team is asking you to be in this study because you are currently enrolled at the CLARE Foundation, Tarzana, Cri-Help, Inc, or Chabad treatment center, or have contacted study staff by phone or email and have identified yourself as a recent stimulant user. Your participation in this study is completely voluntary and optional. You do not need to participate, and if you decide to do so, you may withdraw from the study and stop participating at any time.

WHY IS THIS STUDY BEING DONE?

The purpose of this research study is to determine the effects of an exercise intervention and health-education program on brain dopamine receptors and on cognitive functions that have been linked to these receptors. This study is randomized, meaning that if you choose to participate in this study, you will be randomly assigned to one of two groups: (1) Exercise-Training Program, or (2) Health-Education Training Program.

The following definitions may help you understand how this research study is designed:

A neurotransmitter is a chemical found in the brain that acts like a messenger to transmit signals between cells. Dopamine is a specific type of neurotransmitter, and can influence the way you act in many different ways, including the way you feel, learn, and move. Neurotransmitters attach to receptors in the brain, which act like docks, to produce these different effects.

This study is being funded by the National Institute on Drug Abuse (NIDA).

HOW MANY PEOPLE WILL TAKE PART IN THIS STUDY?

Approximately 130 people will take part in this study at UCLA.

WHAT WILL HAPPEN IF I TAKE PART IN THIS STUDY?

****Refer to Appendix I on page 13 for a sample study timeline.**

Before you begin the study:

Before you begin the study, you will need to complete screening measures (usually scheduled over two visits) to make sure you are eligible for the study. These measures include questionnaires about general demographic information, drug use history, mood symptoms, MA craving and withdrawal, sleep, concomitant medications, adverse medical events, handedness, language preference, physical

activity, and symptoms of nicotine dependence. Additionally, a diagnostic psychiatric interview conducted by a mental health clinician will be administered. If you are eligible for the study after this initial screening, a UCLA research associate will accompany you to UCLA by taxi to complete a medical screening to determine if you are healthy enough to participate. You will provide a urine sample to determine what drugs you have recently used. A breath sample to determine the carbon monoxide levels in your system will also be administered. IF you are female, you will be given a pregnancy test and positive results will result in study exclusion.

The medical screening appointment will also include:

- An electrocardiogram (ECG): A trained technician will attach a number of small electrodes (using a type of adhesive that is easily removed) to your body. The electrical activity of your heart will then be recorded, and the electrodes and adhesive will be removed.
- Laboratory Blood Tests: An 18-cc (a little more than a tablespoon) blood sample will be drawn from your arm using a needle. The laboratory tests from this blood sample will make sure that your liver and kidneys are working normally, and that your standard blood counts (red cell, white cell, and salts) are normal. The blood drawn will be used for a Hepatitis-C & B test to see if you have, or are at risk, for liver disease and if you have been exposed to the Human Immunodeficiency Virus (HIV).

We will test for HIV because earlier studies suggested that HIV infection and development of AIDS can affect brain activity.

If your HIV, Hepatitis C (HCV), or Hepatitis B (HBV) test is positive, you will not be allowed to continue in the study and the results will be reported to the California State Health Department. If you are found to be positive, the study physician will contact you to inform you of your HIV, HCV, or HBV positive status and the implications of these diagnoses. The physician will also refer you to further information and appropriate services. You will not have to pay for testing or the initial counseling or referral from the study physician. However, this study is neither able to provide nor compensate for additional treatment or other services. If your HIV, HCV, and/or HBV tests are negative, the study staff will inform you of your test results. Please feel free to ask the study staff or the study physician if you have any questions about HIV, HCV, or HBV testing.

- Genetics Blood Sample. A small, 10-cc sample of blood (approximately 2/3 tablespoon) will be drawn from your arm to test for certain genetic markers. Genetic results will not be provided. The DNA will be extracted and stored in a laboratory here at UCLA. Regardless of your eligibility to participate in this study, your DNA will be extracted from your blood sample and stored at UCLA and used for future genetic analysis. Part of your sample may be transported to institutions outside of UCLA for analysis, however, long-term storage of your sample will remain at UCLA for the potential of future (secondary) use of unidentified data and/or specimens.

During the study:

If you are meet eligibility and decide to take part in this study, the researcher(s) will ask you to complete the following study procedures:

BASELINE PROCEDURES

Maximal Exercise Performance Test

⌚REQUIRES ONE ~1-HOUR SESSION

Participants in the Exercise condition will complete a maximal cardiopulmonary exercise test (CXT) on a treadmill ergometer. This apparatus measures work or energy expended during exercise using

an incremental exercise protocol, which requires increases in the work rate over time. This test will only occur after participants have completed the physical exam, medical history and clinical labs, and after they have been approved for exercise by the study physician. At various time points during the CXT, 12-lead electrocardiogram (ECG), blood pressure, exhaled gases, and a questionnaire detailing perceived exertion will be obtained.

Brain Functional Magnetic Resonance Imaging (fMRI) Scan- Scans #1, #2, & #3

⌘REQUIRES THREE ~1.5-HOUR SESSIONS

The purpose of this session is to collect information about your brain function and activity, both while you are thinking and at rest. During this session, you will perform various tasks while inside the MRI scanner, including those that require you to make different types of decisions. Prior to the scan (which will take place at either the Ahmanson-Lovelace Brain Mapping Center or the Staglin Center for Cognitive Neuroscience), you will complete a “pre-training” session to prepare you for the tasks that you will complete while in the scanner. Your breathing will be monitored during this scan, using a belt placed around your waist, and you may be asked to briefly hold your breath a few times, so that we can measure how the blood flow in your brain responds. In addition, the electrical resistance of your skin and your facial movements may be monitored by electrodes attached to your skin using a paste that can be easily washed off with soap and water. The maximum time you will spend in the MRI scanner for each session will be about 1 hour and 30 minutes.

Positron Emission Tomography – Computed Tomography (PET-CT) Scans

⌘REQUIRES THREE ~4-HOUR SESSIONS

The three PET sessions will take place at the Veterans Administration West Los Angeles Medical Center. The purpose of these sessions is to measure dopamine receptor availability (number of receptors available for binding) in your brain. This will be done using a PET-CT scanner, and small amounts of a radioactive drug (radiotracer) – [18F]fallypride. For these scans, you will have a small tube called a catheter inserted into a vein in your arm using a needle (intravenously or IV), which will be used for injecting the radiotracers. You will lie on a bed with your head inside the space of the PET-CT scanner, which will take pictures of the radiotracer entering your brain. The pictures will tell us where and how much of the radiotracer accumulates in your brain.

The scans will consist of two 80-minute scan blocks, with a 20-minute break in between. A brief (less than 1 minute) low-dose CT scan of your head will precede each of the two PET scans. Set-up time is about 1 hour before each PET-CT scan. For all scanning sessions (MRI & PET-CT), a member of the research team will be monitoring you constantly so that you may ask questions at any time.

PET procedures and risks will be explained in further detail in the Veterans Administration consent form.

Cognitive Testing

⌘REQUIRES THREE ~2-HOUR SESSIONS

To assess your thinking skills, we will ask you to complete tasks that are designed to evaluate your ability to learn, remember, process information, pay attention, and solve problems. Some of the tasks will be presented on a computer screen, and others will be presented using paper and pencil.

Blood Samples

⌘REQUIRES FOUR DRAWS~ 15-30 MINUTES EACH

At the beginning of the study an initial blood draw (blood draw#1) at your physical exam will be taken to make sure that you are eligible. It will screen for complete blood count, metabolic panel, infectious diseases (Hepatitis B and C, HIV, syphilis) and kidney function.

A blood draw will also be performed on the days of PET-CT Scan #1, PET-CT Scan #2, and PET-CT Scan #3. The sample will be used to determine nicotine, cotinine, and 3-hydroxycotinine levels. If you are a woman we will also determine your estradiol and progesterone levels – no additional blood draw required.

INTERVENTION PROCEDURES (3x/week for 8 weeks)

Both conditions will require you to attend 3 sessions a week over the course of 8 weeks, totaling 24 sessions.

Exercise Training

Each session will consist of a 5-minute warm-up, 30-40 minutes of aerobic activity on a treadmill, 15-20 minutes of resistance training and a 5-minute cool-down with stretching and light calisthenics. A certified exercise physiologist will supervise sessions.

Health Education Training (Control Condition)

Each session will be directed by a counselor, last 50 minutes and consist of an integrated multimedia education program addressing a variety of health, wellness and lifestyle topics such as healthy eating, dental care, acupuncture, and cancer screening.

If you enter the study as an outpatient or were recruited from Craigslist, or become an outpatient no longer residing at CLARE, Tarzana, Chabad, or Cri-Help during the study, you will also provide urine samples at these 3x weekly sessions to ensure that you have abstained from illegal drugs.

POST-INTERVENTION PROCEDURES

Post-intervention procedures will be the same as baseline procedures, with the exception of the maximal exercise performance test.

1-MONTH FOLLOW-UP

This session will take place 4 weeks after you are discharged from the CLARE, Cri-Help, Tarzana, or Chabad treatment center, or 4 weeks after completion of your 8 week intervention and associated scans/cognitive tests if you are no longer residing at a residential treatment facility prior to completing these procedures. UCLA study staff will ask you to return to UCLA for a thirty minute follow-up session, which involves urine testing and questionnaires.

****Refer to Appendix I on page 13 for a sample study timeline.**

HOW LONG WILL I BE IN THIS STUDY?

This study will last approximately 10-12 weeks depending on scanner availability and scheduling. At most, your participation in the study could last up to 3 months.

WHAT KINDS OF RISKS OR DISCOMFORTS COULD I EXPECT?

Known risks and discomforts:

The possible risks and/or discomforts associated with the procedures described in this consent form include:

Psychological Risk: Participants may experience some discomfort associated with filling out questionnaires and answering personal questions during clinical interviews and examinations. They may also experience embarrassment because of items about medical conditions, health-related

behaviors, and stigmatized behaviors, such as drug use, or psychiatric histories. They will be forewarned of this possibility and notified that discomfort with questions may be dealt with by discussing the resultant discomfort with a staff clinician to help resolve the issue or, in some cases, by declining to answer particularly troubling questions. However, the questions are similar to what would be typically asked in a medical setting. Additionally, one of the computerized tasks used in this study involves the viewing of pictures that may be unsettling for some participants (e.g., pictures of nudity and gruesome images). Participants have the right to stop taking any task if they do not want to continue.

Risk of Phlebotomy: When having blood drawn, participants may experience some discomfort as a result of the needle prick in the arm. Some bruising or slight bleeding may occur. Although infection is possible, it is extremely rare, because the needle is sterile and disposable. Occasionally, people feel lightheaded or faint when blood is drawn, but the volume taken will be small (around 10 ml per blood draw).

Risk of MRI: There are no known risks associated with the MRI scanning procedures; however, the magnetism of the machine does attract certain metals. Therefore, if a participant would fail to make the investigator aware of the presence of such a device (e.g., cardiac pacemaker, artificial heart valve, implanted infusion pump, cochlear implant, and spinal cord stimulator) in his/her body, and were to be scanned, the magnetism could affect or stop the device from working properly. In addition to taking a self-report, the team will scan participants for ferromagnetic materials, using a magnetic detector, before the participant enters the MRI suite. The MRI scanning procedure requires that the participant be confined in a small, partially enclosed space. Therefore, during the MRI scans, participants may experience some anxiety or claustrophobia associated with confinement in the MRI tube. The sound of the MRI scanner can be loud, but will be reduced by special earplugs. All efforts will be made to assist the participant in remaining as calm and comfortable as possible.

There is a possibility that a brain abnormality (e.g., cyst, tumor, etc.) may be discovered from the brain images. In this case, a neuroradiologist will examine the images. The radiologist will alert the PIs and give them a radiological interpretation. Dr. Mooney will contact the participant to discuss the scan and potential referrals to local medical facilities. A possible associated risk may be anxiety from the notification of the abnormality. The participant may also face financial costs to seek further treatment and diagnostic tests. Also, since we are conducting a research study and not diagnosing abnormalities in scans, there are limitations on interpretations. It is possible that we may not detect some abnormalities under our examination. If a participant has any health concerns outside the scope of the study, she is encouraged to contact her primary physician.

Risks of Radiation Exposure:

Please be advised that on radiation resulting from procedures at non-UCLA facilities the principal investigator assumes responsibility for your participation and he/she will explain to you the radiation risk involved. UCLA is not responsible for overseeing radiological procedures at non-UCLA facilities.

Risks of Exercise: Exercise will be closely monitored at all times, but nonetheless does carry some risk of minor injury (e.g., muscle strain). Risk of major injury will be minimized by the initial medical screening at baseline and the CXT, which will identify and exclude potential participants with a history of clinically significant cardiovascular disease, or any emergence of symptoms of cardiovascular disease (including clinically significant ECG abnormalities). American Heart Association and American College of Sports Medicine guidelines for maximal exercise testing do not require physician supervision for apparently healthy subjects in the age ranges of subjects enrolled in this study (i.e. ≤45 years). The CXT will be supervised by an exercise physiologist with current basic-life-support training. Finally, a crash cart is available at UCLA in case of emergency.

Health Information Risk: There is also the risk that others may see a participant's Protected Health Information (PHI). PHI is considered individually identifiable health information transmitted or

maintained in any form (electronic means, on paper, online or through oral communication) that relates to the past, present, or future physical or mental health conditions of an individual that may be used or disclosed.

Sample Analysis: DNA extracted from the blood sample provided for genetics testing may be shipped to entities outside of UCLA for analysis. All samples are de-identified and do not contain your name. In the event there is DNA remaining after analysis is complete, the outside institution will either destroy or ship the remaining sample back to UCLA for storage. Long-term storage of your sample will remain at UCLA for the potential of future (secondary) use of unidentified data and/or specimens. The principal investigator of this study, Edythe London, Ph.D., will determine how remaining samples are managed.

Unknown risks and discomforts:

The experimental interventions may have side effects that no one knows about yet. The researchers will let you know if they learn anything that might make you change your mind about participating in the study.

ARE THERE ANY BENEFITS IF I PARTICIPATE?

Possible benefits to me:

This is not a treatment study and there are no anticipated direct benefits for the participant.

Possible benefits to others or society:

This study will help the researchers understand the mechanisms underlying potential improvements in brain function and cognitive performance that are associated with exercise or health-education. This information may aid in the development of effective interventions for stimulant use disorder and other substance use disorders.

WHAT OTHER CHOICES DO I HAVE IF I DON'T WANT TO PARTICIPATE?

If you decide not to take part in this study, or if you withdraw from this study before it is completed, you will still be allowed to continue your treatment at the CLARE, Tarzana, Cri-Hep, or Chabad treatment center.

CAN THE RESEARCHERS REMOVE ME FROM THIS STUDY?

The researchers may end your participation in this study for a number of reasons, such as if your safety and welfare are at risk, if you do not follow instructions or if you miss scheduled visits. The researchers or the study sponsor might also decide to stop the study at any time.

If you decide to stop being in the study, or are removed from the study, or the study is stopped, you will be paid the amount of money that you have earned up to the time that your participation in the study ends. The data collected about you up to the point of withdrawal will remain part of the study and may not be removed from the study database.

HOW WILL INFORMATION ABOUT ME AND MY PARTICIPATION BE KEPT CONFIDENTIAL?

Your specimens (i.e., genetics sample) and Information about you are protected by a federal Certificate of Confidentiality. This means that we can't be forced to release your specimens or information about you for any legal proceeding, even if a court of law asks.

The Certificate allows us to use your specimens and information about you for purposes of this research, or to disclose it for other research when allowed by law. The Certificate requires other researchers to also protect specimens and information we share with them.

There are limits to this protection. The Certificate does not protect your information when:

- You or your family voluntarily release information about yourselves.
- You consent to release of information (for example, the uses described in this form, or if you sign release forms for employment, insurance or medical care).
- A federal agency audits or evaluates research that it funds.
- Researchers are required to report possible intent to harm yourself or others, child abuse, elder abuse, or infectious disease cases.

Use of personal information that can identify you:

All efforts to protect your confidentiality will be taken, including assigning you a code that will replace most identifiable information about you. A list linking the code and your identifiable information will be kept separate from the research data in a password protected file on a password-protected network.

All research data and records will be maintained in a secure location at UCLA and/or the VA. Only authorized individuals will have access to it. Some coded research data with identifiable information removed will be stored on a laptop computer that has encryption software. Coded research data will be stored electronically on a secure network with password protection.

How information about you will be stored:

Data collected in this study may be shared or combined with data from other studies conducted by Dr. London, or approved research collaborators outside of her Research Group. The purpose of data sharing is to address scientific hypotheses that are the same across studies, new hypotheses as additional scientific questions are proposed, and to avoid collecting duplicate data from you whenever possible. This sharing of data is required, and you do not have the option of whether or not your data is shared.

All brain imaging data will be archived in digital form, and subject to review for scientific purposes by the investigators and their colleagues, as part of ongoing efforts to extend and improve the technologies of magnetic resonance imaging and positron emission tomography, and our understanding of the brain. These additional uses of the data acquired from you will not include any identifying information. All information that you provide and data that are obtained from you during participation in the study will be kept either on secure servers or in locked file cabinets accessible only by the research staff conducting the study.

People and agencies that will have access to your information:

The research team, authorized personnel at the treatment center you are residing at (Clare, Tarzana, Chabad, or Cri-Help) and UCLA personnel, the study sponsor and regulatory agencies such as the Food and Drug Administration (FDA), may have access to study data and records to monitor the study. Research records provided to authorized, non-UCLA personnel will not contain identifiable information about you. Publications and/or presentations that result from this study will not identify you by name.

The researchers intend to keep the research data and records indefinitely for future research. In the future, data collected for this study may be shared with other researchers for other studies that are unknown at this time. Any data shared with other researchers, will not include your name or other personal identifying information.

In the event that you tell the research staff that you are thinking about killing yourself or you answer “yes” to a question about having thoughts about suicide, the investigator will ask you more questions about the thoughts. Depending on how intense your thoughts are or how much you feel like hurting yourself, the research staff may provide you with referrals for treatment, work with you to contact your personal physician, a trusted family member, or a therapist to discuss your thoughts of harming yourself; or work with you on a plan that may include getting you to a hospital for safety.

When the results of the research are published or discussed in conferences, no information will be included that would reveal your identity. The results of your medical history will remain in the clinical research medical chart maintained at UCLA and/or the VA. These records will not be combined with other medical records, such as the medical records maintained by your primary physician. Results of your medical history and physical exam will be kept in locked file cabinets in a separate office from the questionnaires and data pertaining to the tasks/procedures that you will complete as part of this study.

How long information from the study will be kept:

Per UCLA regulations, your study data must be maintained for at least 3 years. If you agree on the signature page to allow your data to be used for future studies, it may be maintained longer.

ARE THERE ANY COSTS FOR TAKING PART IN THIS STUDY?

Neither you nor your insurance company will be billed for your participation in this study. The study will pay for the cost of all required study items and services as described in this consent form.

WILL I BE PAID FOR MY PARTICIPATION?

The payment schedule is as follows:

1. You will be paid a \$25 for completing each intake screening visit (Total \$50).
2. You will be paid \$100 for completing each PET-CT scan sessions – 3 PET scans (Total \$300).
3. You will be paid \$30 for each fMRI (Total \$90).
4. You will be paid a total of \$30 for each cognitive assessment (Total \$90).
5. You will be paid a total of \$20 for each scan day blood draw (Total \$60).
6. You will be paid a total of \$20 for being abstinent on each scan day and cognitive testing day (Total \$120)
7. You will be paid \$10 for attendance of the 3x weekly sessions (Total \$80).
8. You will be paid \$10 for the 1-month follow up session.
9. OPTIONAL: You will be paid a maximum of \$960 for negative urine drug screenings if you become an outpatient during study participation.
10. You will be paid two completion bonuses of \$100 if you complete all procedures – 1 after completion of the 8 week intervention and scans/cognitive testing, and 1 after completion of the 1-month follow-up session.

If you drop out of the study or are excluded at some point, you will be paid for the components you have already successfully completed. If you start the study as an outpatient or are not participating in a residential treatment program, or decide to become an outpatient and no longer reside at a residential program while you are participating, you will have the option of continuing in the study and completing urinary drug screens during your 3x weekly sessions. You will be paid for each negative urine test (\$20 for initial test increasing \$5 for each subsequent negative test, to a maximum of \$35 per test).

Participants may earn up to a maximum of \$1000 (\$1960 with contingency management) for completion of study procedures. Payment will be in gift cards. Social security numbers will be collected in the event that you earn more than \$600 from their participation in the study. If you earn more than \$600, the amount is counted as income and tax forms must be submitted that include your social security number.

In addition to compensation for completion of study procedures, you will be reimbursed for parking expenses or taxi transportation on the days you are escorted to UCLA or the VA Greater Los Angeles. If an appointment lasts more than 5 hours, a break will be provided.

Use of My Specimens:

Any specimens (e.g., blood) obtained for the purposes of this study will become the property of the University of California. Once you provide the specimens you will not have access to them. The University may share your specimens in the future with other researchers or outside institutions. Information that identifies you will not be shared with anyone outside of UCLA. The specimens will be used for research and such use may result in inventions or discoveries that could become the basis for new products or diagnostic or therapeutic agents. In some instances, these inventions and discoveries may be of potential commercial value and may be patented and licensed by the University. You will not receive any money or other benefits derived from any commercial or other products that may be developed from use of the specimens.

WHO CAN I CONTACT IF I HAVE QUESTIONS ABOUT THIS STUDY?

The Research Team:

You may contact Edythe London, PhD at 310-825-0606 with any questions or concerns about the research or your participation in this study.

UCLA Office of the Human Research Protection Program (OHRPP):

If you have questions about your rights while taking part in this study, or you have concerns or suggestions and you want to talk to someone other than the researchers about the study, you may contact the UCLA OHRPP by phone: (310) 825-5344; by email: mirb@research.ucla.edu or U.S. mail: 10889 Wilshire Blvd, Suite 830
Los Angeles, CA 90095-1406.

Public Information about this Study:

ClinicalTrials.gov is a website that provides information about federally and privately supported clinical trials. A description of this clinical trial will be available on <http://www.ClinicalTrials.gov>, as required by U.S. Law. This website will not include information that can identify you. At most, the website will include a summary of the results. You can search this website at any time.

WHAT HAPPENS IF I BELIEVE I AM INJURED BECAUSE I TOOK PART IN THIS STUDY?

It is important that you promptly tell the researchers if you believe that you have been injured because of taking part in this study. You can tell the researcher in person or call him/her at the number(s) listed above.

If you are injured as a result of being in this study, UCLA will provide necessary medical treatment. The costs of the treatment may be covered by the University of California or the study sponsor (NIDA) or billed to you or your insurer just like other medical costs, depending on a number of factors. The

University and the study sponsor do not normally provide any other form of compensation for injury. For more information about this, you may call the UCLA Office of the Human Research Protection Program at 310-825-5344 or send an email to mirb@research.ucla.edu.

WHAT ARE MY RIGHTS IF I TAKE PART IN THIS STUDY?

Taking part in this study is your choice. You can choose whether or not you want to participate. Whatever decision you make, there will be no penalty to you and you will not lose any of your regular benefits.

- You have a right to have all of your questions answered before deciding whether to take part.
- Your decision will not affect the medical care you receive from UCLA.
- If you decide to take part, you can leave the study at anytime.
- If you decide to stop being in this study you should notify the research team right away. The researchers may ask you to complete some procedures in order to protect your safety.
- If you decide not to take part, you can still get medical care from UCLA.

HOW DO I INDICATE MY AGREEMENT TO PARTICIPATE?

If you agree to participate in this study you should sign and date below. You have been given a copy of this consent form and the Research Participant's Bill of Rights to keep. You will be asked to sign a separate form authorizing access, use, creation, or disclosure of health information about you.

AUTHORIZATION TO BE CONTACTED REGARDING FUTURE RESEARCH

In the future, we may want to obtain additional samples or follow-up information about your health or medical care. Should this be needed, an authorized person from the UCLA research team will contact you to ask whether you would be interested in participating in this additional research or other research studies you may be eligible for.

Please indicate by checking and initialing below what you authorize regarding participation in other research studies:

- [] _____ I give permission for researchers to contact me regarding other research studies.
 [] _____ I do not give permission for researchers to contact me regarding other research studies.

SIGNATURE OF THE PARTICIPANT

 Name of Participant

 Signature of Participant

 Date

SIGNATURE OF PERSON OBTAINING CONSENT

 Name of Person Obtaining Consent

 Contact Number

 Signature of Person Obtaining Consent

 Date

APPENDIX I –CALENDAR

The following is an example of the study timeline.

IN-PERSON SCREENING VISITS

The screening procedures are used to determine your final qualification status.

Visit 1	Visit 2
Compensations: \$25 Time: ~2.5 hours Location: UCLA -Consent -Questionnaires -Structured Clinical Interview	Compensation: \$25 Time: ~2.5 hours Location: UCLA -Questionnaires -Bloodwork -Physical exam

The study team needs at least 48 hours to determine your final qualification status. You will be notified in-person of your status.

STUDY SESSIONS

Baseline	Exercise Group	Health Edu Group	4 weeks	Exercise Group	Health Edu Group	Post-training	1-month Follow-up
Compensation: \$180 Time: ~6-7 hours - Cognitive Testing - PET/CT scan - fMRI scan - VO2 Max Exercise Test	Compensation: \$40 (\$10/wk) Time: ~1 hour 3X per week Location: UCLA - Supervised aerobic activity and resistance training	Compensation: \$40 (\$10/wk) Time: ~1 hour 3X per week Location: UCLA - Multimedia education program directed by counselor	Compensation: \$180 Time: ~6 hours - Cognitive Testing - PET/CT scan - fMRI scan	Compensation: \$40 (\$10/wk) Time: ~1 hour 3X per week Location: UCLA - Supervised aerobic activity and resistance training	Compensation: \$40 (\$10/wk) Time: ~1 hour 3X per week Location: UCLA - Multimedia education program directed by counselor	Compensation: \$180 Time: ~6 hours - Cognitive Testing - PET/CT scan - fMRI scan	Compensation: \$110 Time: ~30 min -Urine Testing -Questionnaire

If you complete all study components, you will receive a \$200 completion bonus (\$100 after 8 wk intervention, \$100 paid at the follow-up)

If you participate while not residing in a residential treatment program (as an outpatient or recruited from online ads/flyers) you can earn up to \$1080 for negative urinary drug screenings (\$960 for contingency management and \$120 for testing negative on scan/cognitive testing days).

Maximum Payment Total: \$880 (1960 with contingency management and scan/cognitive day abstinence)