Client Name	DOB



### **ESSC Multi-Service Informed Consent**

This Multi-Service Informed Consent is designed to obtain lawful consent prior to the performance of any one or more of the following Exercise and Sports Science Center [ESSC] services.

# ☐ Cardiopulmonary Exercise Test [CPX]

## **Purpose and Explanation**

You will perform an exercise test on a motor driven treadmill or bicycle ergometer for approximately 10-12 minutes. The exercise intensity will begin at a low level and will be advanced in stages of varying duration depending upon your fitness level. The test is designed to evaluate how well your heart and lungs work together during exercise. You will be wearing a fitted mask with a device called a pneumotach which is used to sample and measure the air you breathe in and out. The pneumotach will allow you to take in all the air you need. Your electrocardiogram, heart rate, blood pressure, other physiological responses and any symptoms that may occur will be carefully monitored before, during, and post-testing. We may stop the test prematurely due to symptoms and/or signs such as an abnormal heart rate, blood pressure response, and/or changes in the electrocardiogram.

## Attendant Risk and Discomforts/Benefits of Testing

Possible changes that can occur during testing include: abnormal blood pressure (too high or too low), fainting, irregular, fast, or slow heart rhythm, and in very rare instances a heart attack, stroke, or death. Other symptoms, such as chest discomfort, lightheadedness, dizziness, and shortness of breath may also occur. We are equipped and trained to respond to emergent events through evaluation of preliminary information related to your health; and observations made during and after testing. The test will assist in the diagnosis of your health condition; in evaluating the effect of your medications; and/or in evaluating the type and intensity of exercise, training, or physical activities you may safely engage in.

# **□** Walking/Running Analysis

## **Purpose and Explanation**

Walking or Gait analysis promotes proper walking/hiking form, reduces the risk of chronic joint pain, and can be a useful fall-prevention tool. Our running analysis is designed to help you improve your running form while reducing injury risk from repetitive movement. Approximately 55 markers [walking] and 35 markers [running] will be attached to your body at specific anatomical locations. Our 8 high speed cameras will then capture your walking motion as your walk through a viewing area in our lab. Running analysis will be done on a motorized treadmill at 3-4 different speeds. Our staff will work with you to determine running speeds based upon your previous running experiences during training and/or competition.

#### **Attendant Risk and Discomforts**

These are quite minimal and would be those associated with walking and running.

### ☐ Lactate Profile

## **Purpose and Explanation**

The lactate profile assessment is a less than maximal exercise protocol designed to more precisely pinpoint your Lactate or Anaerobic Threshold for exercise training purposes. The approximately 20-30 minute protocol will be designed specifically for you based upon information you provide relative to your health, exercise and/or competitive training history and current activity/performance levels. More specifically this includes: average training heart rates/exercise intensities; average training paces; recent performance times; or average power outputs for the cyclist. The protocol, conducted on either a treadmill or bicycle ergometer, consists of several four (4) minute workloads. Gas exchange data will be collected during the protocol and your heart rate will be monitored via an electrocardiogram system. At the conclusion of each stage a finger stick blood sample will be drawn and then analyzed using a portable lactate analyzer. The protocol will conclude once the lactate threshold is clearly identified.

## Attendant Risk and Discomfort/Benefits of Testing

The protocol requires a finger stick following each work stage to acquire serial whole blood lactate samples. The ESSC staff will do everything possible to minimize the discomfort associated with the finger sticks. We will use universal precautions and we may sample several fingers if necessary. We will work with you and attempt to keep a finger stick viable so that it may be used to obtain more than one blood sample. Possible changes during testing include: abnormal blood pressure (too high or too low), fainting, irregular, fast, or slow heart rhythm, and in very rare instances a heart attack, stroke, or death. We are equipped and trained to respond to emergent events through evaluation of preliminary information related to your health; and observations made during and after testing. The lactate profile will help more precisely identify the lactate or anaerobic threshold, and allow us to make personalized exercise or training recommendations.

# ☐ Resting Energy Expenditure

### **Purpose and Explanation**

While lying on your back in a relaxed position in a darkened climate controlled room, expired air is collected and analyzed for a 30 minute period. This information is used to calculate the total number of calories your body uses per day at rest as well as the mixture of fuels used in the resting condition. The data may be used by our Sport Nutritionist and other SMFC staff to assist in the development of individualized nutrition and/or weight management programming.

# ☐ Wingate Anaerobic Power Test [WAnT]

### **Purpose and Explanation**

You will perform the test on our Velotron Electronic Cycle Ergometer. The Wingate is the protocol used most often to measure muscle performance. It is also considered "the most tested test" to evaluate the capacity and performance of your anaerobic energy systems. You will be fitted to the bicycle prior to testing. A warm up procedure consisting of 5-10 minutes of moderate intensity cycling interspersed with 2 or 3 all-out sprints lasting 4-8 seconds will precede testing. The test involves spinning at the highest RPM's possible against a prescribed force of 0.075-0.085 Kilo pounds (KP) per Kilogram (KG) of Body Weight [approximately 7.5-8.5% of total body weight] for 30 seconds. This will be followed by an adequate recovery/cool-down period based upon need. This test is very strenuous and requires maximum effort to derive the most accurate result. The results may be used by SMFC staff to develop personalized exercise/training recommendations. In addition, data will assist in the evaluation of your Competitive Edge Barbell I, II, and METCON training experience, should you be enrolled in that program.

#### **Attendant Risk and Discomforts**

The most commonly reported side effects include nausea and or vomiting. An active recovery/cooldown period is utilized to minimize these and other possible symptoms. Other symptoms, such as chest discomfort, lightheadedness, dizziness, and shortness of breath may also occur. The test is NOT recommended for those with known cardiovascular or pulmonary disease. We are equipped and trained to respond to emergent events and work to prevent them through evaluation of preliminary information related to your health; observations made during and after testing.

#### **Inquiries**

Questions about all ESSC procedures are encouraged and may be asked at any time. If you have questions or concerns, please ask us for further clarification.

## **Responsibilities of the Participant**

You are responsible for fully disclosing your medical history, prescription medications, and symptoms prior to, during, and following testing. Please be prepared to give your best effort; the harder you work the more useful the clinical and performance data generated will be. Your prompt and honest reporting of any pain, discomfort, or unusual feelings during testing is extremely important in order to maintain safety and diagnose your condition. Our trained staff will work with you by asking questions and prompting you at various stages of the testing.

## **Consent of Patient**

I hereby consent to voluntarily engage in the checked/selected ESSC procedures. My permission to perform these tests is given voluntarily. I understand that I am free to stop any test at any point if I desire to do so. This may however result in a loss of data; making it more challenging to develop individualized exercise/training recommendations. I have read this form, and I understand the test procedure(s) that I will perform and the attendant risks and discomforts. I have had an opportunity to ask questions and all such questions have been answered to my satisfaction; therefore I consent to participate in the test(s) indicated.

	Date	
Signature of Patient		
	Date	
Signature of Witness		
	Date	
Signature of Parent or Guardian (if patient is a minor)		