



UNIVERSITY OF LIMERICK RESEARCH ETHICS COMMITTEE

RISK ASSESSMENT FORM – PROCEDURES INVOLVING HUMAN SUBJECTS

Procedure No

Title of Procedure

Name of Assessor Assessment date

Does this procedure already have ethical approval ?

If so, enter ethical number and expiry date

1

This procedure involves collecting expired gases from healthy human volunteers at rest and during exercise. This is done using a mouthpiece or facemask, whereby the volunteer is able to inhale room air, but the exhaled gas is collected and either stored in Douglas bags or fed to an on-line gas analysis system. Whichever method is used, the expired gas is sampled so that carbon dioxide and oxygen concentrations can be measured, and these together with the gas volume are used to calculate the volunteers metabolic rate.

This procedure can be undertaken in a number of different exercise modes, including cycling, running, rowing and tethered swimming.

2

Others, please specify

3 Eligibility of subject(s) to be used

PESS student (U.G. or P.G.)

University staff or campus personnel

Others, please specify

Members of the general public engaged in research projects granted ethical approval.

4 Potential risks. To be explained before obtaining consent

None, or minimal discomfort only

Expired gas collection does not itself constitute any risk to the volunteer.

5 Action to be taken in the event of a foreseeable emergency

The procedure will be terminated if the volunteer shows any sign of distress.

Standard first aid procedures may be required depending on the severity of the situation. The following standard procedure should be followed in the event of an incident occurring in the PESS building.

1. Stop the procedure. Position the subject to prevent self-injury.
2. If appropriate, raise the subject's lower limbs to improve blood flow. Should the subject fail to respond summon help immediately.
3. Check vital signs airways, breathing and circulation (ABC)
4. If required attempt CPR as soon as possible.
5. Requesting Help: Emergency Contact telephone numbers are listed on laboratory door:
 - During normal working hours 9am-5pm, use lab phone to contact the Student Health Centre on **061-202534**
 - Outside of normal working hours, or if the Student Health Centre number is engaged/busy, use the laboratory phone to dial 3333 for UL security personnel who will then contact the ambulance service. Contact one of the PESS First Aiders – names are listed on the PESS laboratory door.
6. When contacting the above clearly state: Location, Building, Room Number, Nature of Incident/Accident and provide a contact number.
7. Complete the UL 'Accident & Emergency' form (completed by the investigator, not the volunteer). Forms available on UL HR website: <https://www.ul.ie/hr/hr-policies-procedures-and-forms-z>

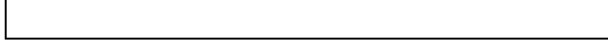
6 Level of supervision required for procedure

PESS lecturing, research staff and teaching assistants

PESS postgraduate researcher

Others, please specify

Trained UG (submaximal exercise only)



7

Other documentation required for this assessment ?

PESS standard pre-test questionnaire

Detailed protocol

Others, please specify

Participant Information Sheet & Consent Form

Note: Standard Operating Procedures for Ultima (Breeze Suite) are available on [PESS Sharepoint](#)

For office use only

PROCEDURES INVOLVING HUMAN SUBJECTS

Title of Procedure | Expired gas analysis | Procedure No | SS 009 |
Name of Assessor | Alan Donnelly | Assessment date | November 2018 |

[L] | Committee approval for experiment

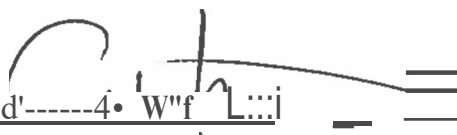
[KJ] | Granted |

D

Others, please specify:

D

Comments/conditions


Signed: Alan Donnelly
(Head of Department)

Date: f3