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Title: Use of the Stuart Orbital Shaker and Incubator

Version: v2

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SOP History		
Number	Date	Reason for Change
v1	09/09/2013	Original
v2	09/09/2018	Update and change of author

1.0 Purpose –

The purpose of this SOP is to outline the principles of the routine use of the Stuart orbital shaker and incubator in Laboratory 248 at the St Andrews School of Medicine (SASoM).

2.0 Scope –

This SOP applies to routine use and maintenance of the Stuart orbital shaker and incubator within the SASoM.

3.0 Responsibilities –

It is the responsibility of all users of the Stuart orbital shaker and incubator within the SASoM to comply with this SOP.

4.0 Procedure –

The Stuart orbital shaker and incubator is a fan-assisted heated incubator with an orbital shaker, allowing the shaking of samples at variable speeds between 20 and 250rpm and an orbit of 16mm.

The incubator is generally used for the growth of bacteria.

NOTE: DO NOT use this incubator for growing yeast or mammalian cells!



Loading of samples:

The shaker platform is fitted with a robust mat and adjustable rubber coated bars to secure the load.

- The incubator can hold conical flasks of up to 1L.
 - ALWAYS label your samples with date, name and group initials.
 - ALWAYS cover your samples with a loose lid, foil or punched Parafilm/ Nescofilm
1. If necessary, turn off the shaking platform using the switch at the right of the bottom panel of the incubator.
 2. Secure the samples on the platform using the rubber bars or place them into a tube rack secured between the bars as appropriate.
 3. Close the door of the incubator. NOTE: Ensure the door is fully closed.
 4. Turn the speed controller dial on the bottom panel of the incubator to the right until the required shaking speed is observed.
 - a. For bacteria, this is usually 210-250 rpm
 - b. NEVER change the shaking speed when other samples are loaded already!
 5. Switch the shaking platform back on.
 6. ALWAYS check that samples are sufficiently secured and that glass vials are not hitting each other or the metal scaffold of the platform!

Temperature Selection

NEVER change the temperature setting, if other samples are incubating already!

1. Depress and hold the **press to set switch** and turn the temperature control knob until the required temperature appears on the display. On releasing the switch, the display will revert to the actual temperature of the incubator.
2. The **load indicator** will remain lit until the desired temperature setting is reached at which time it will flash to show that the temperature is being controlled.
3. Once the temperature has been set, turn the **over temperature control knob** to approximately 20°C above the set temperature.

Any spillages MUST be cleaned up immediately and completely using 70% ethanol and white tissue.

5.0 Personal protection –

Howie coat and gloves must be worn at all times.

6.0 Training –

All users have to be trained before using the instrument by a designated person.

7.0 Related documents –

- 7.1 Stuart Shaker Incubator instruction manual



8.0 Approval and sign off –

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Signature: _____ Date: _____

Management Approval:

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