

## STANDARD OPERATING PROCEDURE

<b>Procedure:</b>	<b>Using Bunsen burners</b>
<b>School/Department:</b>	School of Molecular Bioscience
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### Section 1 - Personal Protective Equipment

1. Lab coat or gown
2. Proper enclosed footwear
3. Keep hair tied back

### Section 2 – Potential Hazards + Safety precautions

1. Bunsen flame can cause burns. Keep body parts clear!
2. Bunsen flame can start fires if flammable materials are nearby. Keep flammable materials well clear, and do not leave Bunsen unattended.
3. Bunsen can create stuffy and hot atmosphere. Only use in well-ventilated areas.

### Section 3 – Procedure

1. Know the location and use of fire extinguishers, fire blankets, fire exits
2. Know the emergency evacuation signals and procedure
3. Work in properly ventilated laboratory
4. Ensure no flammable materials are close to the flame.
  - Ethanol dishes for spread plating should be >50 cm away.
  - Other solvents should be put away in solvent storage lockers (these lockers should be >3 m from an ignition source)
  - Watch out for paper notes hanging on shelves above bench – these are not safe if you are using a Bunsen at this bench, and should be removed.
5. Routinely check Bunsen tubing for leaks and corrosion. Replace tubing if any evidence of corrosion is present.
6. Ensure user is properly trained or supervised. For junior scientists, ensure proper instruction by coordinators/ demonstrators/ supervisors.
7. Spark-type lighters are preferred over matches or gas lighters.
8. Ensure Bunsen is correctly and tightly fitted to gas outlet.
9. If using matches / lighter, light the match / lighter before the opening gas tap.
10. Ignite the Bunsen on the safety flame. Can leave on safety flame if doing spread-plating with ethanol. Switch to hot flame if you need to sterilise an inoculating loop, or if you need a strong updraft to create a sterile work area.
11. Do not leave a Bunsen burner lit and unattended, even for a short period.
12. Double check the gas outlet is properly closed and the Bunsen flame extinguished before leaving the lab.

### Section 4 – Incidents

1. Have a fire blanket and/or fire extinguisher in close proximity
2. In case of burn, rinse skin with cold water immediately for at least 15 minutes, report incident to your supervisor. Any injuries, incidents, or near misses should be reported via the online incident reporting system – Riskware.
3. Staff and students should not attempt to extinguish large fires. In this case, alert all those nearby to evacuate (including yourself). Call 000 (or 0-000 from an internal phone) and alert the fire department. Also contact Uni security (1-3333 or 9351-3333), your supervisor, and the building fire warden. Close doors on the fire if possible as you leave. Alternatively, you can break the glass on a 'break glass' fire alarm, which will activate the emergency evacuation routine.

