

School of Biomedical Sciences  
**Standard Operating Procedures**



<b>Title</b>	Operating the Vibratomes	
<b>Date</b>	11/04/2022	
<b>Location</b>	<b>Bld: 65 Skerman</b> <b>Room: 210</b>	
<b>Equipment Custodian</b>	<b>Contact: Darryl Whitehead</b>	<b>Expert User: Darryl Whitehead</b>

<b>Task</b>	<p>Working with vibratomes, whether preparing or cutting a sample, is a true art. You need specific hands-on training from the laboratory supervisor before using a vibratome. Because of the associated hazards, safety must be incorporated into every step of the process to keep fingers, hands and other items protected. Follow the safety tips provided below to keep your fingers, hands, and your artistic touch in perfect condition and to prevent exposure to solvents and biological tissues.</p> <p>Dispose of blades when appropriate or upon completion of work</p>
<b>Pre start checks</b>	<ul style="list-style-type: none"> <li>• Complete SBMS OH&amp;S Induction and local histology induction</li> <li>• Obtain equipment specific training provided by the Senior histologist</li> <li>• Read and understand SOP and Risk Assessments</li> <li>• Book appropriate device using the SBMS Online Booking System</li> </ul>
<b>Safety considerations</b>	<p><b>Personal Protective Equipment (PPE):</b>          Lab coat or gown          Fully closed shoes          Gloves          Safety glasses as required</p> <p><b>General precautions:</b></p> <p>Handle blades very carefully when installing or removing. Follow the histologist's guidelines explicitly.</p> <p>Store blades in a covered container. Use a container that has guides to hold the blades rigid.</p> <p>Never leave blades on countertops. Lacerations can occur when reaching across the countertop and inadvertently contacting an unprotected blade.</p> <p>When setting up the microtome, ALWAYS position the sample first then put in the blade.</p> <p>When applying the brake, ensure that it is tight. Most accidents occur when the brake slips and the operator's hand is drawn into the blade.</p> <p>When leaving the vibratome, even for a short time, ensure that the blade</p>

	<p>guard is in place. Place the Identification sign on the unit guarding the blade and sample.</p> <p>When preparing a paraffin sample for the vibratome, remember to glue the sample securely.</p> <p>To avoid compression or knife marks, ensure that your blade is clean. Follow the histologist's guidelines for cleaning the work area. Always use a brush for cleaning the blade, thus removing your hands from potential contact.</p> <p><b>Emergency Procedures:</b>  In the case of emergency,  All incidents should be reported to the Facility Staff and Manager, Ext 51929, Safety Coordinator, Ext 53221, and/or Security 53333.  All injuries must be reported to SBMS HSW Management, Ext 53221 or 51269, Building Management, Ext 53105.  All incidents and injuries must be recorded in the UQ Incident and Injury Database.</p>
<p><b>Procedure</b></p>	<ol style="list-style-type: none"> <li>1. Validate that NO knife is present in the mount</li> <li>2. Turn machine on at wall and on rear of vibratome</li> <li>3. Retract knife mount to a safe distance from the mount and lock</li> <li>4. Remove the mounting plate and water bath</li> <li>5. Secure the sample onto the plate and validate it is secure</li> <li>6. Place into bath area and fill with water</li> <li>7. Level bath and specimen to be in-line with cut desired and lock clamp</li> <li>8. Use manual feed and bring the knife mount to be immediately above and adjacent to the sample</li> <li>9. Set cutting window with electronic means</li> <li>10. Install a blade into the knife mount and secure with allen tool</li> <li>11. Set frequency and amplitude of vibration</li> <li>12. Set feed and trim rate</li> <li>13. Set mode to single cut</li> <li>14. Perform cutting</li> <li>15. Use brushes to move or lift samples from the bath, NEVER use hands.</li> </ol>

<b>Legislative requirements</b>	▪ AS 2243.6 Safety in laboratories, mechanical aspects
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