**UW Medicine - Pathology**

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Snap Freezing Tissue Procedure

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| Adopted Date: 08/30/91Review Date: 10/29/10Revision Date: 04/13/11 |

PURPOSE

To provide instructions on how to snap freeze tissue.

PROCEDURE

1. Wash tissue in transport buffer, three times for 10 minutes each.
2. Record measurements (if applicable). Put tissue in appropriate size vinyl cryo-mold. Tissue should not be thicker then the cryomold, and there should be some space between the tissue and the edge of the cryomold. Cryomolds are available in NW-211A.
3. Layer OCT over the tissue until completely covered. Try not to get bubbles-they cause cutting problems. Don't put on too much OCT or it becomes very difficult to put a check on properly. Let the tissue sit in OCT for several minutes to avoid ice crystals.
4. You are now ready to freeze. Fill the thermos 1/2 -3/4 full of liquid nitrogen. Fill the cup (suspended on a string at the freezing station) about 2/3 full of iso-pentane. Lower the iso-pentane into the liquid nitrogen. When it stops smoking it will be cold enough.
5. Using the long forceps and being careful to keep the tissue level, lower your specimen into the iso-pentane. Keep the specimen here 12-20 seconds. The tissue is now snap-frozen and you can store in the -70 C or put in the cryostat for cutting. Do not leave tissue in cryostat over night.

Written By: Director Approval:

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