

SOP # **1**

Subject **Frozen sections**

Sheet **1** of **2**

Rev 4/19/18

Effective Date

Author

Date 3/15/17		3/15/17	Jocelyn Fimbres
-----------------	--	---------	-----------------

1. PURPOSE

- 1.1 To produce a tissue section from fresh tissue as close to the living state as possible without loss of protein and nucleic acid targets.

2. SCOPE

- 2.1 This procedure can be performed by a person trained in cryotomy or by anyone under the direct supervision of a histotechnician in this lab.

3. RESPONSIBILITIES

- 3.1 It is the responsibility of the histology lab to make sure that the cryostat is set at the proper temperature for doing frozen sections and that the cryostat is clean and well maintained.

4. MATERIALS and EQUIPMENT

- 4.1 Cryostat
- 4.2 Specimen stages
- 4.3 Disposable microtome blades
- 4.4 Microscope slides
- 4.5 OCT
- 4.6 Brushes
- 4.7 Forceps
- 4.8 Gauze
- 4.9 Heat dissipater

5. PROCEDURE

- 5.1 Place a small amount of Oct on a specimen stage which is at room temperature
- 5.2 Orient the fresh tissue in the OCT on the stage
- 5.3 Place the specimen stage with tissue on one of the deep freeze stations in the cryochamber. The tissue will freeze in a few minutes. Place the heat dissipater over the tissue.
- 5.4 When tissue is frozen, place the specimen onto the clamping device
- 5.5 Trim the specimen sufficiently to get the entirety of the specimen face.
- 5.6 Obtain a section with the forceps and brush
- 5.7 Mount onto slides and place onto cold rack

- 5.7.1 Fix in acetone or formalin if staining procedure calls for it
- 5.8 Remove the specimen from the clamp
- 5.9 Seal the surface of the trimmed tissue with more OCT and freeze
- 5.10** Place tissue in -80 freezer.