



THE UNIVERSITY OF TOLEDO
MEDICAL CENTER

College of Medicine
Department of Pathology
Health Science Campus
Block Health Science Bldg., Room 029
3035 Arlington Avenue
Toledo, OH 43614-5804
Phone: 419-383-3484
Fax: 419-383-2845
Email: EMLab@utoledo.edu

Instructions for Tissues Submitted for Electron Microscopy

Tissue Sample Collection (i.e., kidney, tumor specimens):

- Place minced (1 mm cubes) specimen in 3% glutaraldehyde immediately.
- Send specimen at ambient temperature in a vial containing 3% glutaraldehyde.
- Please provide the following clinical information: Patient's age, sex, and site of biopsy, clinical symptoms, signs and duration (including family history), other relevant clinical laboratory studies, systemic/concurrent disease.

Special Instructions:

Muscle Biopsy:

- A muscle biopsy should be obtained using a Price muscle clamp. The biopsy site should not be injected with anesthetic and the tissue should not be repositioned once placed in the clamp.
- A portion of *fresh tissue* should be excised from the excess tissue at a cut edge of the biopsy for enzyme histochemistry studies; the fresh tissue should be placed in gauze soaked with saline in a secure sample container.
- The clamped tissue should be placed in 3% glutaraldehyde fixative once the tissue for histochemistry has been obtained. The container should have a tightly fitting cap to prevent fixative spills during transport.
- Notify our Histology Laboratory (Telephone number: 419-383-5229) including method of shipment.
- Place the specimen container inside a large container packed with crushed ice. Do not use dry ice to avoid freezing during transport.
- Send the specimen by courier following biopsy.
- Please provide the following clinical information: Patient's age, sex, and site of muscle biopsy, symptoms, signs and duration (including family history), results of EMG study, other relevant clinical laboratory studies, concurrent disease (connective tissue or neoplastic disease).

Bone Marrow:

- Place bone marrow core specimen in 3% glutaraldehyde fixative immediately.
- Send the specimen at ambient temperature in a vial containing 3% glutaraldehyde fixative.
- Include a bone marrow aspirate smear slide.
- Please provide the following clinical information: Patient's age, sex, and site of biopsy, clinical symptoms, signs and duration (including family history), other relevant clinical laboratory studies, systemic/concurrent disease.

Nerve Biopsy:

- Place intact (not minced) specimen in 3% glutaraldehyde fixative immediately.
- Send the specimen at ambient temperature in a vial containing 3% glutaraldehyde fixative.
- Please provide the following clinical information: Patient’s age, sex, and site of biopsy, clinical symptoms, signs and duration (including family history), other relevant clinical laboratory studies, systemic/concurrent disease.

Nasal or Ciliary Mucosal Biopsy:

- Should be placed in Cell or Viral Culture Transport Media. Important: DO NOT FIX the specimen.
- Optimal time for obtaining best results is to send tissue within 1 to 2 hrs of collection.
- Send immediately to Dr. Gunning at the address below.

Delivery Times: Send specimen at ambient temperature via overnight delivery. Samples are accepted and run Monday through Friday. The laboratory is CLOSED weekends and holidays.

Testing Method: Standard tissue processing methods for Electron Microscopy are used to obtain ideal sections for analysis.

Specimen Analysis: Direct examination of tissue ultrastructure.

Specimen Delivery Address:

Please remember to include the *E.M. Requisition Form for Reference Laboratory Testing*.

Via Courier:	Via Fed Ex or DHL:
Pathology Laboratory University of Toledo Medical Center 3000 Arlington Avenue Toledo, OH 43614 Phone: (419) 383 - 3752	Attention: Dr. W.T. Gunning Department of Pathology University of Toledo Health Science Campus Block Health Sciences Bldg., Room 029 3035 Arlington Avenue Toledo, OH 43614-5804 Phone: (419) 383 - 3484